

Image ID	Image Desc	Credit	Page
C200-02P-	Grey squirrel entering squirrel proof feeder	Natural Visions/Alamy	NOS
C200-03P-	Oops	Kelly Jett/Alamy	NOS
C200-04P-	Researcher Joel Clement studies lichen on Douglas Fir (<i>Pseudotsuga menziesii</i>) snag, Wind River, Washington	MARK MOFFETT/MINDEN PICTURES/National Geographic Stock	NOS
C200-05P-	Scientists Sampling Soil for Bacteria in Amboseli National Park	Frans Lanting/CORBIS	NOS
C200-06P-R-MSS12	A chemist in a laboratory.	Ryan McVay/Getty Images	NOS
C200-07P-	Potted cherry tomatoes (<i>Solanum lycopersicum</i> var. <i>cerasiforme</i>) in greenhouse	Lynn Keddie/Photolibrary	NOS
C200-08P-	Seminar on the AIDS virus	Jose Luis Pelaez, Inc./CORBIS	NOS
C200-09P-	Physical therapist Laura Friedman displays an American Iraqi war veteran's C-Leg, computerized prosthetic leg in a physical therapy room at Walter Reed Army Medical Center in Washington, DC on January 7, 2004. The C-Leg is one of the latest designs of computer-aided limbs. It was designed to aid older amputees, but has been popular among soldiers returning from Iraq, because it is easier to re-learn how to walk with. Most amputees who use this leg will also have a mechanical leg, because you can't run in while wearing this prosthetic device	David S. Holloway/Getty Images	NOS
C200-100P-	Setup lab equipment as described in the lab on the next page and as shown below. Color the water blue with food coloring so that it can be seen in the photo. Have a student in the photo hold the graduated cylinder upright in the beaker and another student should be about to blow into the straw. Make sure the equipment set up is shown in the photo. The equipment setup is more important than showing students. In the photo that you take, the graduated cylinder should be full of water. The photo should be taken before the students start blowing in the straw. The setup for this lab varies a little from the photo shown on the right. Your stopper will have two holes. One hole will have tubing attached to it (as shown here) and the other hole will contain a flexible straw (where the students blow).	Hutchings Photography/Digital Light Source	NOS

C200-101P-	Show the setup as shown in the go by photo. However, the Erlenmeyer flask should contain yeast, sugar and water as described in the lab on the next page. One student should be holding the graduated cylinder upright so that it is not tilted and another student should be holding a stopwatch and timing the experiment. The photo should be taken after some gas is produced and it has displaced some water in the graduated cylinder.	Hutchings Photography/Digital Light Source	NOS :
C200-13P-	Young man leaning over a table looking at color shade samples	Plush Studios/Getty Images	NOS
C200-14P-	Red squirrel burying food	Richard Peters/Alamy	NOS
C200-15P-	A biologist weighs a Giant Titicaca Frog while men in a canoe search for frogs, Lake Titicaca, Bolivia and Peru	PETE OXFORD/MINDEN PICTURES/National Geographic Stock	NOS
C200-17P-	Triple beam balance, used to weigh	Charles D. Winters/Photo Researchers	NOS
C200-18P-	Thermometer and fresh mowing for composting	Biosphoto/NouN/Peter Arnold, Inc.	NOS
C200-19P-	Laboratory Glassware	David Chasey/Getty Images	NOS
C200-20P-	young teen girl looking thru classroom microscope	Lauren Burke/Getty Images	NOS
C200-21P-	Scientist using laser scan microscope to study cells for diabetes research at the National Institutes of Health.	Richard T. Nowitz/CORBIS	NOS
C200-22P-	Close up of magnifying glass highlighting fingerprints on document	Stockbyte/Getty Images	NOS :
C200-23P-	A pathologist placing specimen onto microscopic slides.	Medicimage/Visulas Unlimited, Inc.	NOS :
C200-26P-	Algae grown for biofuel, light micrograph. Algae are photosynthesizing micro-organisms that can convert carbon dioxide into large amounts of lipids. The lipids can be converted into biodiesel by reacting with alcohol, a process known as transesterification. Unlike fossil fuels, biodiesel is biodegradable and non-toxic. However it is more costly to produce. Algae can also be cultivated to produce pharmaceutical products, dyes and edible oils, or dried and used as fertilizer or burned as biomass.	NREL/US Department of Energy/Photo Researchers	NOS :

C200-27P-	Diesel, Rudolf; Ingenieur, Erfinder des nach ihm benannten Dieselmotors; Paris 18.3.1858-(ertrunken im Ärmelkanal) 29.9.1913. Porträtaufnahme, undat., digitale Kolorierung.	akg-images	NOS :
C200-28P-	the first diesel engine world wide at the MAN museum in Augsburg, Germany, 1 February 2008. It was constructed by Rudolf Diesel at the engine works Augsburg-Nuremberg.	Stefan Puchner/UPPA/Photoshot	NOS :
C200-29P-	Algae bloom	Tom & Therisa Stack/Tom Stack & Associates	NOS :
C200-30P-	Light micrograph of Diatoms. These are members of the algae, and are of great biological and economic importance since they form a fundamental part of the food chain of both marine and freshwater environments. Magnification: x63 (35mm size)	Jan Hirsch/Photo Researchers	NOS :
C200-31P-	Industrial algae growing plant, Negev, Israel	Peter Ginter/Getty Images	NOS :
C200-33P-	Algenol, an algae biofuel created in plastic bag bioreactors	Andrew Kaufman	NOS :
C200-34P-	In this Thursday, June 11, 2009 photo, sunlight from a solar collector on the roof of Utah State University's Energy Laboratory in Logan, Utah, is sent through fiber optics to stimulate the growth of algae. Earlier this year, USU was among several institutions to receive grant money from the U.S. Department of Defense to research ways to convert algae into biofuels for military jets. Utah State is examining about 300 algae species, including some from the Great Salt Lake in search of one that grows fast and produces plenty of fatty oils.	Colin Braley/AP Images	NOS :
C200-36P-R-MSS12	Algae Cultivation Plant	Peter Ginter/Getty Images	NOS :
C200-37P-	Seamibiotic open algae ponds in Israel	Courtesy Seamibiotic Ltd	NOS :

C200-38P-	Bone bioceramic, for use in bone reconstruction, being treated with bone stem cells. The bioceramic is hydroxyapatite, a natural calcium phosphate mineral complex that is the crystalline component of bones and teeth. This synthetic bone mimics natural bone structure. Its porous structure allows a type of precursor (stem) cell (bone marrow stromal cells, BMSCs), to grow and develop into new bone tissue. The bioceramic can be shaped into implants that are treated with BMSCs (obtained from the patient's bone marrow), and grafted into the body to replace missing bone. Photographed in Faenza, Italy.	Klaus Gulbrandsen/Photo Researchers	NOS
C200-39P-	Scanning electron micrograph of human red blood cells on a capillary wall mag 1635x	Dennis Kunkel Microscopy, Inc./PHOTOTAKE/Alamy	NOS
C200-40P-	Medical Equipment	Don Farrall/Getty Images	NOS :
C200-41P-	Studio shot top-loading single-pan electronic balance	Louis Rosenstock/The McGraw-Hill Companies	NOS
C200-42P-	Chapter Opener: Scientist collecting data about corals , Sulawesi Indonesia (replaces C200-01P)	Images & Stories/Alamy	NOS
C200-43P-	golden frog of Supata, newly discovered frog species in 2007 from the Colombia rainforest	Giovanni Chaves-Portilla/Fundación Ecodiversidad Colombia	NOS
C200-60P-2 IN20	UNSPECIFIED - 1982: The Alvin, a research submarine, cruising beneath the Pacific Ocean. (Photo by Henry Groskinsky/Time & Life Pictures/Getty Images)	Henry Groskinsky/Time & Life Pictures/Getty Images	NOS
C200-61P-2 IN20	Scientist Looking Through a Scanning Electron Microscope	Noel Hendrickson / Getty Images	NOS
C200-62P-2 IN20	Hume Plateau, Great Dividing Range, Eastern Australia. A man performs an ecological survey of mountain eucalyptus trees.	Bill Hatcher/National Geographic/Getty Images	NOS
C200-63P-2 IN20	Hiker Crossing Tsangpo River	Charlie Munsey/CORBIS	NOS
C200-64P-2 IN20	School of Fish AA035080	Georgette Douwma/Getty Images	NOS
FM-09P-874183-B	Tools - Set -up - spiral bound notebook with lab notes and a pencil	Matt Meadows	NOS
MSS12_PIPETTE _THIN--A	photograph of a thin stem pipette	Hutchings Photography/Digital Light Source	NOS :

MSS12_STOPPE R_1HOLE- MSS12P	MSS12_STOPPER_1HOLE	The Mcgraw-Hill Companies	NOS :
MSS12_STOPPE R_2HOLE- MSS12P	MSS12_STOPPER_2HOLE	The Mcgraw-Hill Companies	NOS :
MSS12_TUBING _CLEAR-MSS12P	MSS12_TUBING_CLEAR	The Mcgraw-Hill Companies	NOS :
C03-14P-874184	Pinus longaeva (Patriarch Picnic Area, Inyo National Forest, CA)	Dr. Daniel Nickrent/Southern Illinois University	
C03-14P-874184	Pinus longaeva (Patriarch Picnic Area, Inyo National Forest, CA)	Dr. Daniel Nickrent/Southern Illinois University	
C03-18P-874184	Corn silk: the female flower of the corn plant	Brad Mogen/Visuals Unlimited	
C03-18P-874184	Corn silk: the female flower of the corn plant	Brad Mogen/Visuals Unlimited	
C03-19P-874184- A	CLOSEUP OF MATURE FEMALE MAIZE KERNELS ON EAR, ZEA MAYS, MAIZE, ITHACA, NY V	Walter H. Hodge/Peter Arnold, Inc.	
C03-19P-874184- A	CLOSEUP OF MATURE FEMALE MAIZE KERNELS ON EAR, ZEA MAYS, MAIZE, ITHACA, NY V	Walter H. Hodge/Peter Arnold, Inc.	
C03-21P-874184- A	Snap Pea "Super Sugar Mel" pods close-up	Alan & Linda Detrick/Photo Researchers	
C03-21P-874184- A	Snap Pea "Super Sugar Mel" pods close-up	Alan & Linda Detrick/Photo Researchers	
C03-22P-874184- A	Common Dandelion (Taraxacum officinale) flower. Great Smoky Mountains National Park, Tennessee.	Adam Jones/Photo Researchers	
C03-22P-874184- A	Common Dandelion (Taraxacum officinale) flower. Great Smoky Mountains National Park, Tennessee.	Adam Jones/Photo Researchers	
C03-23P-874184	common dandelion seed head	CORBIS	
C03-23P-874184	common dandelion seed head	CORBIS	
C03-51P-874184	Wild Strawberries Hertfordshire UK Summer	Renee Morris/Alamy	
C03-51P-874184	Wild Strawberries Hertfordshire UK Summer	Renee Morris/Alamy	

C03-53P-874184	America's strawberry growers are testing various new methods of growing beautiful berries like this one without using methyl bromide, an effective but environmentally unfriendly soil fumigant that's scheduled for phaseout by 2005.	USDA/Photo Researchers	
C03-53P-874184	America's strawberry growers are testing various new methods of growing beautiful berries like this one without using methyl bromide, an effective but environmentally unfriendly soil fumigant that's scheduled for phaseout by 2005.	USDA/Photo Researchers	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C225-01P-	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	000-0
C225-01P-	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	000-0
C225-01P--A	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	
C225-01P--A	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	
C225-02P-	Lesson 1 Opener: Gardenia leaf cross-section showing the thin waxy cuticle on the upper and lower surface of the leaf. The rectangular line of cells near top of the leaf just below the cuticle is the leaf epidermis containing epidermal cells but no chloroplasts. The lower cuticle is visible but the epidermal cells are not visible in this image. The cuticle and epidermis help to protect the leaf. SEM, X160.	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	

C225-02P-	Lesson 1 Opener: Gardenia leaf cross-section showing the thin waxy cuticle on the upper and lower surface of the leaf. The rectangular line of cells near top of the leaf just below the cuticle is the leaf epidermis containing epidermal cells but no chloroplasts. The lower cuticle is visible but the epidermal cells are not visible in this image. The cuticle and epidermis help to protect the leaf. SEM, X160.	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C225-03P-	Oak Leaves	Siede Preis/Getty Images	
C225-03P-	Oak Leaves	Siede Preis/Getty Images	
C225-04P-	Lesson 2 Opener: VENUS FLYTRAP with trapped fly prey Dionaea muscipula Native of swamps in North Carolina, south eastern USA	NHPA/Photoshot	
C225-04P-	Lesson 2 Opener: VENUS FLYTRAP with trapped fly prey Dionaea muscipula Native of swamps in North Carolina, south eastern USA	NHPA/Photoshot	
C225-05P-	(Oxalis species). Phototropism (also known as heliotropism) is the bending growth movement of parts of plants in response to a light stimulus.Movement produced by unequal growth is due to differences in auxin (a type of growth hormone) concentration.	Cathlyn Melloan/Getty Images	
C225-05P-	(Oxalis species). Phototropism (also known as heliotropism) is the bending growth movement of parts of plants in response to a light stimulus.Movement produced by unequal growth is due to differences in auxin (a type of growth hormone) concentration.	Cathlyn Melloan/Getty Images	
C225-06P-	Bindweed climbing round leaf of monocotyledon	Stephen Dalton/Minden Pictures	
C225-06P-	Bindweed climbing round leaf of monocotyledon	Stephen Dalton/Minden Pictures	

C225-07P-	Part 1 of 2 : Gravitropism (sometimes referred to as geotropism) is a plant response to earth's gravitational field. Plant stems (shoots) exhibit negative gravitropism because they respond by growing away from the gravitational attraction. Gravitropism is initiated when starch filled plastids called amyloplasts sink towards the gravitational field. This stimulates the release of the growth hormone auxin. This pea plant, Pisum sativum, shows a turn in its stem which occurred after its pot was tipped over. The response also occurs in the dark showing that it is not phototropism.	Martin Shields/Photo Researchers	
C225-07P-	Part 1 of 2 : Gravitropism (sometimes referred to as geotropism) is a plant response to earth's gravitational field. Plant stems (shoots) exhibit negative gravitropism because they respond by growing away from the gravitational attraction. Gravitropism is initiated when starch filled plastids called amyloplasts sink towards the gravitational field. This stimulates the release of the growth hormone auxin. This pea plant, Pisum sativum, shows a turn in its stem which occurred after its pot was tipped over. The response also occurs in the dark showing that it is not phototropism.	Martin Shields/Photo Researchers	
C225-08P-	Part 2 of 2: Pea (Pisum sativum) seedling emerging from soil.	Martin Shields/Photo Researchers	
C225-08P-	Part 2 of 2: Pea (Pisum sativum) seedling emerging from soil.	Martin Shields/Photo Researchers	
C225-09P-	Gibberellin-treated grapes on right, control grapes on left...	Sylvan Wittwer/Visuals Unlimited	
C225-09P-	Gibberellin-treated grapes on right, control grapes on left...	Sylvan Wittwer/Visuals Unlimited	
C225-100P-	two stalks of celery in BEAKERS with blue water in the bottom of each of the BEAKERS	Hutchings Photography/Digital Light Source	
C225-100P-	two stalks of celery in BEAKERS with blue water in the bottom of each of the BEAKERS	Hutchings Photography/Digital Light Source	
C225-101P-	student planting radishes in baggie. Open package of radish seeds should be on table while student places some seeds in the soil.	Hutchings Photography/Digital Light Source	
C225-101P-	student planting radishes in baggie. Open package of radish seeds should be on table while student places some seeds in the soil.	Hutchings Photography/Digital Light Source	

C225-102P-	pot of seedlings, preferably young radish seedlings. 3 toothpicks should be stuck in the soil so that they are parallel to three separate seedlings in the direction of the growth. The seedlings should be growing straight up. Place a gooseneck lamp near the pot, with the light turned toward the seedlings.	Hutchings Photography/Digital Light Source	
C225-102P-	pot of seedlings, preferably young radish seedlings. 3 toothpicks should be stuck in the soil so that they are parallel to three separate seedlings in the direction of the growth. The seedlings should be growing straight up. Place a gooseneck lamp near the pot, with the light turned toward the seedlings.	Hutchings Photography/Digital Light Source	
C225-103P-	long, narrow container with soil in it. A strip of each of the following is lying across the container next to one another: cardboard, vellum, plastic needlepoint grid. The container is next to a window.	Hutchings Photography/Digital Light Source	
C225-103P-	long, narrow container with soil in it. A strip of each of the following is lying across the container next to one another: cardboard, vellum, plastic needlepoint grid. The container is next to a window.	Hutchings Photography/Digital Light Source	
C225-104P-	Full-frame assortment of fruits and vegetables, including pineapple, apples, limes, grapes, bananas, onions, peppers, cabbages, carrots and potatoes	Ingram Publishing/SuperStock	
C225-104P-	Full-frame assortment of fruits and vegetables, including pineapple, apples, limes, grapes, bananas, onions, peppers, cabbages, carrots and potatoes	Ingram Publishing/SuperStock	
C225-105P-	student cutting out a flower petal from a piece of construction paper. Various craft supplies—chenille stems, tissue paper, construction paper, tag board, pom poms, plastic beads, bottle of glue—should be on the table.	Hutchings Photography/Digital Light Source	
C225-105P-	student cutting out a flower petal from a piece of construction paper. Various craft supplies—chenille stems, tissue paper, construction paper, tag board, pom poms, plastic beads, bottle of glue—should be on the table.	Hutchings Photography/Digital Light Source	
C225-106P-	student beginning to write a lab plan in a spiral bound notebook. Student should be wearing an apron and have goggles around his or her neck. A quad of plants should also be on the table.	Hutchings Photography/Digital Light Source	

C225-106P-	student beginning to write a lab plan in a spiral bound notebook. Student should be wearing an apron and have goggles around his or her neck. A quad of plants should also be on the table.	Hutchings Photography/Digital Light Source	
C225-10P-	Mature woman tending cucumber crops in greenhouse. Tadcaster, North Yorkshire, England.	Monty Rakusen/Getty Images	
C225-10P-	Mature woman tending cucumber crops in greenhouse. Tadcaster, North Yorkshire, England.	Monty Rakusen/Getty Images	
C225-11P-	Lesson 3 Opener: Dandelion in UV light. Colored photograph of a dandelion (<i>Taraxacum officinale</i>) showing the bull's-eye pattern of absorbed and reflected ultraviolet (UV) light on the flower head. These patterns are known as 'nectar guides' and help to attract pollinating insects, which can see UV light. Humans are unable to see these patterns. This image was taken using a digital camera adapted to filter and detect UV light. The resulting monochrome image was colored on computer. Areas that absorb UV light are dark in color, except the flower head which is colored red. UV light is outside the visible spectrum and does not have a true color.	Bjorn Rorslett/Photo Researchers	
C225-11P-	Lesson 3 Opener: Dandelion in UV light. Colored photograph of a dandelion (<i>Taraxacum officinale</i>) showing the bull's-eye pattern of absorbed and reflected ultraviolet (UV) light on the flower head. These patterns are known as 'nectar guides' and help to attract pollinating insects, which can see UV light. Humans are unable to see these patterns. This image was taken using a digital camera adapted to filter and detect UV light. The resulting monochrome image was colored on computer. Areas that absorb UV light are dark in color, except the flower head which is colored red. UV light is outside the visible spectrum and does not have a true color.	Bjorn Rorslett/Photo Researchers	
C225-12P-	Vegetative or asexual reproduction by a Hens-and-Chicks plant (<i>Sempervivum</i>)	Wally Eberhart/Visuals Unlimited/Getty Images	
C225-12P-	Vegetative or asexual reproduction by a Hens-and-Chicks plant (<i>Sempervivum</i>)	Wally Eberhart/Visuals Unlimited/Getty Images	
C225-14P-	White-footed Mouse (<i>Peromyscus leucopus</i>) eating a berry, Ohio.	Gary Meszaros/Visuals Unlimited/Getty Images	

C225-14P-	White-footed Mouse (<i>Peromyscus leucopus</i>) eating a berry, Ohio.	Gary Meszaros/Visuals Unlimited/Getty Images	
C225-15P-	Two <i>Pyracantha</i> cuttings one, with roots, has been treated with rooting compound	Nigel Cattlin/Photo Researchers	
C225-15P-	Two <i>Pyracantha</i> cuttings one, with roots, has been treated with rooting compound	Nigel Cattlin/Photo Researchers	
C225-16P-	Laboratory propagation flasks of plants growing under artificial lights in sterile conditions test tubes shows tissue culture	GardenPhotos.com/Alamy	
C225-16P-	Laboratory propagation flasks of plants growing under artificial lights in sterile conditions test tubes shows tissue culture	GardenPhotos.com/Alamy	
C225-17P-	Apical dominance comparing two runner bean plants where one has had the growing point removed	Nigel Cattlin/Alamy	
C225-17P-	Apical dominance comparing two runner bean plants where one has had the growing point removed	Nigel Cattlin/Alamy	
C225-19P-	A man pushes a cart of green bananas into a gas chamber for ripening.	B. ANTHONY STEWART/National Geographic Stock	
C225-19P-	A man pushes a cart of green bananas into a gas chamber for ripening.	B. ANTHONY STEWART/National Geographic Stock	
C225-20P-	Color enhanced scanning electron micrograph (SEM) of daisy (prickly), cherry (oblong), and hornbeam (round) pollen grains. Pollen is the bearer of the plant's male genetic component. Pollen can cause allergies on skin and mucous membranes of sensitive persons. Pollination season is from April to May. Magnification: 1100x.	Eye of Science/Photo Researchers	
C225-20P-	Color enhanced scanning electron micrograph (SEM) of daisy (prickly), cherry (oblong), and hornbeam (round) pollen grains. Pollen is the bearer of the plant's male genetic component. Pollen can cause allergies on skin and mucous membranes of sensitive persons. Pollination season is from April to May. Magnification: 1100x.	Eye of Science/Photo Researchers	
C225-21P-	Green peas	Comstock/PunchStock	
C225-21P-	Green peas	Comstock/PunchStock	
C225-22P-	Corn Seeds	Siede Preis/Getty Images	
C225-22P-	Corn Seeds	Siede Preis/Getty Images	
C225-23P-	Digitally-enhanced close-up of a dandelion clock (genus <i>Taraxacum</i>) dispersing its seeds against a blue sky with clouds	Ingram Publishing/SuperStock	

C225-23P-	Digitally-enhanced close-up of a dandelion clock (genus <i>Taraxacum</i>) dispersing its seeds against a blue sky with clouds	Ingram Publishing/SuperStock	
C225-24P-	Strawberries	Elizabeth Whiting & Associates/Alamy	
C225-24P-	Strawberries	Elizabeth Whiting & Associates/Alamy	
C225-25P-	Chapter Review Questions 5 & 6 - The clinging tendrils of the garden pea plant exhibit the biological phenomenon of thigmotropism, Ithaca, New York.	Scott Camazine/Photo Researchers	
C225-25P-	Chapter Review Questions 5 & 6 - The clinging tendrils of the garden pea plant exhibit the biological phenomenon of thigmotropism, Ithaca, New York.	Scott Camazine/Photo Researchers	
C225-26P-	ferns. Christmas Ferns, <i>Polystichum acrostichoides</i> , new growth.	Mark Steinmetz	
C225-26P-	ferns. Christmas Ferns, <i>Polystichum acrostichoides</i> , new growth.	Mark Steinmetz	
C225-27P-	green leaf	The McGraw-Hill Companies	
C225-27P-	green leaf	The McGraw-Hill Companies	
C225-28P-	Fern Canyon with stream in Redwood National Park, California	CARR CLIFTON/ MINDEN PICTURES/National Geographic Stock	
C225-28P-	Fern Canyon with stream in Redwood National Park, California	CARR CLIFTON/ MINDEN PICTURES/National Geographic Stock	
C225-29P-	Hairy-Cap Moss. <i>Polytrichum</i> SP. Shows Gametophytes Sporophytes w/ Stalk, Spore Case, Calyptra. H	Ed Reschke/Peter Arnold Inc.	
C225-29P-	Hairy-Cap Moss. <i>Polytrichum</i> SP. Shows Gametophytes Sporophytes w/ Stalk, Spore Case, Calyptra. H	Ed Reschke/Peter Arnold Inc.	
C225-30P-	Knarled bristlecone pine trees (<i>Pinus aristata</i>), some of which date from over 4000 years ago, grow at a height of 11000 feet, at the Patriarch Grove, in the Californian White Mountains, USA.	Andrew Brown; Ecoscene/CORBIS	
C225-30P-	Knarled bristlecone pine trees (<i>Pinus aristata</i>), some of which date from over 4000 years ago, grow at a height of 11000 feet, at the Patriarch Grove, in the Californian White Mountains, USA.	Andrew Brown; Ecoscene/CORBIS	

C225-31P-	organic Oregon Giant Snow Pea (Pisum sativum) flowering in home vegetable garden in the spring - Asheville, North Carolina, USA	Don Klumpp/Getty Images	
C225-31P-	organic Oregon Giant Snow Pea (Pisum sativum) flowering in home vegetable garden in the spring - Asheville, North Carolina, USA	Don Klumpp/Getty Images	
C225-50P-	Green Science feature - Cattle grazing on cleared Tropical Rain Forest land with tree stumps, Amazon region, Para, Brazil	Jacques Jangoux/Photolibary	
C225-50P-	Green Science feature - Cattle grazing on cleared Tropical Rain Forest land with tree stumps, Amazon region, Para, Brazil	Jacques Jangoux/Photolibary	
C225-51P-	Green Science feature - Maple Leaves Growing on a Branch	Digital Vision/Getty Images	
C225-51P-	Green Science feature - Maple Leaves Growing on a Branch	Digital Vision/Getty Images	
C225-52P-	Green Science feature - AMAZON - PERU, vicinity Satipo. Deforestation. Slash and burn migrant farmer clearing land. The whole valley once forested have been cleared and only the steep slopes remain. Few settlers have the experience or knowledge to farm the poor soil on slopes recently under forest cover. Few bother with tea	MARK EDWARDS/Peter Arnold, Inc.	
C225-52P-	Green Science feature - AMAZON - PERU, vicinity Satipo. Deforestation. Slash and burn migrant farmer clearing land. The whole valley once forested have been cleared and only the steep slopes remain. Few settlers have the experience or knowledge to farm the poor soil on slopes recently under forest cover. Few bother with tea	MARK EDWARDS/Peter Arnold, Inc.	
MSS12_RADISH _SEEDLINGS- MSS12P	Lab material shot of radish seedlings.	Stockdisc/PunchStock	
MSS12_RADISH _SEEDLINGS- MSS12P	Lab material shot of radish seedlings.	Stockdisc/PunchStock	
MSS12_SUN_SH IELDS-MSS12P	Shot of needlepoint plastic, card boards, and vellum	The Mcgraw-Hill Companies	
MSS12_SUN_SH IELDS-MSS12P	Shot of needlepoint plastic, card boards, and vellum	The Mcgraw-Hill Companies	
PM_SEED_GRAS S.PSD-XPML08	Seed Grass	Macmillan/McGraw-Hill	

PM_SEED_GRAS S.PSD-XPML08	Seed Grass	Macmillan/McGraw-Hill	
PM_SOIL_POTTI NG.PSD-XPML08	Soil Potting	Macmillan/McGraw-Hill	
PM_SOIL_POTTI NG.PSD-XPML08	Soil Potting	Macmillan/McGraw-Hill	
C203-01P-	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	000-0
C203-01P-	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	000-0
C203-01P--A	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C203-01P--A	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C203-02P-	Lesson Opener: Galapagos Land Iguana (Conolophus subcristatus) feeding on (Portulaca sp) flowers during brief rainy season, Plazas Island, Galapagos Islands, Ecuador	Tui De Roy/Minden Pictures	
C203-02P-	Lesson Opener: Galapagos Land Iguana (Conolophus subcristatus) feeding on (Portulaca sp) flowers during brief rainy season, Plazas Island, Galapagos Islands, Ecuador	Tui De Roy/Minden Pictures	
C203-03P-	Honeycomb with bee (detail)	Bon Appetit/Alamy	
C203-03P-	Honeycomb with bee (detail)	Bon Appetit/Alamy	

C203-04P-	Color enhanced illustration of cork wood cells by Robert Hooke from observations of cork wood under a microscope. Robert Hooke (1635-1703) was born in England and studied at Oxford University, assisting in chemistry under Robert Boyle. The illustration appeared in his book "Micrographia", which was published in 1667 and is believed to be the first major book on microscopy. The term "cells" was coined by Hooke in the publication, describing the pores observed in the cork. "Micrographia" also contributed to areas of optics, combustion, and geology.	Omikron/Photo Researchers	
C203-04P-	Color enhanced illustration of cork wood cells by Robert Hooke from observations of cork wood under a microscope. Robert Hooke (1635-1703) was born in England and studied at Oxford University, assisting in chemistry under Robert Boyle. The illustration appeared in his book "Micrographia", which was published in 1667 and is believed to be the first major book on microscopy. The term "cells" was coined by Hooke in the publication, describing the pores observed in the cork. "Micrographia" also contributed to areas of optics, combustion, and geology.	Omikron/Photo Researchers	
C203-05P-	Virginia Spiderwort (<i>Tradescantia virginiana</i>), Shenandoah National Park, Virginia and North Carolina	Tim Fitzharris/Minden Pictures/Getty Images	
C203-05P-	Virginia Spiderwort (<i>Tradescantia virginiana</i>), Shenandoah National Park, Virginia and North Carolina	Tim Fitzharris/Minden Pictures/Getty Images	
C203-06P-	A stained micrograph of a spider-wort leaf (<i>tradescantia</i>) showing the stomates, guard cells, nuclei, and cell walls. The genus is named after John Tradescant who was the gardener to King Charles I in 1629. Tradescantia was once thought to be a cure for spider bites hence the common name spider-wort. In the USA it generally blooms from June through August. Magnification: LM 350X.	James M. Bell/Photo Researchers	

C203-06P-	A stained micrograph of a spider-wort leaf (tradescantia) showing the stomates, guard cells, nuclei, and cell walls. The genus is named after John Tradescant who was the gardener to King Charles I in 1629. Tradescantia was once thought to be a cure for spider bites hence the common name spider-wort. In the USA it generally blooms from June through August. Magnification: LM 350X.	James M. Bell/Photo Researchers	
C203-07P-	TEM image of phagocytosis; Amoeba engulfing a green algal cell for food. Magnification = 9,750x at max size (9.3" by 5.0")	Biophoto Associates/Photo Researchers	
C203-07P-	TEM image of phagocytosis; Amoeba engulfing a green algal cell for food. Magnification = 9,750x at max size (9.3" by 5.0")	Biophoto Associates/Photo Researchers	
C203-08P-	Mitosis Series: Prophase Stage. SEM x3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-08P-	Mitosis Series: Prophase Stage. SEM x3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-09P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-09P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-100P-	student sitting behind a lab table [desk] and placing a pipe cleaner in a circle on a piece of construction paper. other craft items-yarn, pom poms (various sizes and colors), beads (various sizes and colors), colored markers, and aluminum foil-should also be on the table [desk].	Hutchings Photography/Digital Light Source	
C203-100P-	student sitting behind a lab table [desk] and placing a pipe cleaner in a circle on a piece of construction paper. other craft items-yarn, pom poms (various sizes and colors), beads (various sizes and colors), colored markers, and aluminum foil-should also be on the table [desk].	Hutchings Photography/Digital Light Source	

C203-101P-	close-up of a student's hands. The student is in the process of completing a cut through a cube of egg white (2 cm per side and soaked in blue food coloring so the outside of the cube is blue and the inside is white) with a plastic knife. The egg white is on a paper towel. Also on the paper towel are a metric ruler and a 250-mL beaker containing 100 mL of dark blue water. Follow these steps to set up the shot: 1. hard cook a large egg; cool; remove shell 2. prepare the colored water by adding 10 drops of blue food coloring to 100mL of water. 3. Prepare the cooked egg white by cutting to size (2cm x 2cm x 2cm) and placing in colored water for at least 30 minutes. 4. plastic knife should NOT be clear, white or blue (these colors are difficult to see against background and/or match the color of the egg).	Hutchings Photography/Digital Light Source	
C203-101P-	close-up of a student's hands. The student is in the process of completing a cut through a cube of egg white (2 cm per side and soaked in blue food coloring so the outside of the cube is blue and the inside is white) with a plastic knife. The egg white is on a paper towel. Also on the paper towel are a metric ruler and a 250-mL beaker containing 100 mL of dark blue water. Follow these steps to set up the shot: 1. hard cook a large egg; cool; remove shell 2. prepare the colored water by adding 10 drops of blue food coloring to 100mL of water. 3. Prepare the cooked egg white by cutting to size (2cm x 2cm x 2cm) and placing in colored water for at least 30 minutes. 4. plastic knife should NOT be clear, white or blue (these colors are difficult to see against background and/or match the color of the egg).	Hutchings Photography/Digital Light Source	
C203-10P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-10P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-12P-	A glass of water and salt	FoodCollection/SuperStock	
C203-12P-	A glass of water and salt	FoodCollection/SuperStock	

C203-13P-	Mammalian cell. Colour transmission electron micrograph of a single mammalian tissue culture cell. Taking up most of the cell is the nucleus (red, round), where genes are stored in the form of chromosomes. The orange area in the nucleus is the nucleolus. This is the most active part of the nucleus, and contains unraveled chromosomes involved in making protein-manufacturing bodies called ribosomes. Outside the nucleus is the cell cytoplasm (blue). It contains a mixture of cell organelles including mitochondria that supply the cell with energy. Magnification x300 at 6x6cm size.	Dr. Gopal Murti/Photo Researchers	
C203-13P-	Mammalian cell. Colour transmission electron micrograph of a single mammalian tissue culture cell. Taking up most of the cell is the nucleus (red, round), where genes are stored in the form of chromosomes. The orange area in the nucleus is the nucleolus. This is the most active part of the nucleus, and contains unraveled chromosomes involved in making protein-manufacturing bodies called ribosomes. Outside the nucleus is the cell cytoplasm (blue). It contains a mixture of cell organelles including mitochondria that supply the cell with energy. Magnification x300 at 6x6cm size.	Dr. Gopal Murti/Photo Researchers	
C203-14P-	Lesson Opener: Velcro. (SEM 40x)	Eye of Science/Photo Researchers	
C203-14P-	Lesson Opener: Velcro. (SEM 40x)	Eye of Science/Photo Researchers	
C203-15P-	Bronchial cilia. Colored scanning electron micrograph (SEM) of a normal human bronchial epithelium, the mucus membrane lining the major airways of the lung. Clumps of hair-like cilia (green/pink) protrude from the tops of specialized epithelial cells (brown). Rhythmic movements of the cilia serve to move bacteria and other particles away from the gas-exchanging parts of the lung and towards the throat, where they can be expelled. Magnification unknown.	SPL/Photo Researchers	

C203-15P-	Bronchial cilia. Colored scanning electron micrograph (SEM) of a normal human bronchial epithelium, the mucus membrane lining the major airways of the lung. Clumps of hair-like cilia (green/pink) protrude from the tops of specialized epithelial cells (brown). Rhythmic movements of the cilia serve to move bacteria and other particles away from the gas-exchanging parts of the lung and towards the throat, where they can be expelled. Magnification unknown.	SPL/Photo Researchers	
C203-16P-	Eukaryotic cell showing numerous organelles, including a large and prominent nucleus and abundant endoplasmic reticulum. This plasma cell is a mature B-lymphocyte or white blood cell. TEM X15,500	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-16P-	Eukaryotic cell showing numerous organelles, including a large and prominent nucleus and abundant endoplasmic reticulum. This plasma cell is a mature B-lymphocyte or white blood cell. TEM X15,500	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-18P-	Electron micrograph of a rough endoplasmic reticulum from a neuron, showing numerous ribosomes on the cisternae surface, mitochondrion (purple), and nucleus (blue), mag. 19,030x. The endoplasmic reticulum is an ultramicroscopic organelle of nearly all higher plant and animal cells.	Dennis Kunkel / Phototake	
C203-18P-	Electron micrograph of a rough endoplasmic reticulum from a neuron, showing numerous ribosomes on the cisternae surface, mitochondrion (purple), and nucleus (blue), mag. 19,030x. The endoplasmic reticulum is an ultramicroscopic organelle of nearly all higher plant and animal cells.	Dennis Kunkel / Phototake	
C203-19P-	(animal cell) Mitochondrion. TEM X14,000	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-19P-	(animal cell) Mitochondrion. TEM X14,000	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-20P-	The chloroplast is the structure or plastid within which chlorophyll is located and photosynthesis occurs.(no mag listed)	Dr. R. Howard Berg/Visuals Unlimited/Getty Images	
C203-20P-	The chloroplast is the structure or plastid within which chlorophyll is located and photosynthesis occurs.(no mag listed)	Dr. R. Howard Berg/Visuals Unlimited/Getty Images	

C203-21P-	Electron micrograph of a Golgi apparatus of a plant, showing stacks of cisternae and vesicles, mag. 11,010x.	Dennis Kunkel / Phototake	
C203-21P-	Electron micrograph of a Golgi apparatus of a plant, showing stacks of cisternae and vesicles, mag. 11,010x.	Dennis Kunkel / Phototake	
C203-22P-	Lesson Opener: beekeeper (see caption in notes).	LIU JIN/AFP/Getty Images	
C203-22P-	Lesson Opener: beekeeper (see caption in notes).	LIU JIN/AFP/Getty Images	
C203-25P-	Lesson Opener: canadian waterweed creating bubbles underwater	Colin Milkins/Photolibrary	
C203-25P-	Lesson Opener: canadian waterweed creating bubbles underwater	Colin Milkins/Photolibrary	
C203-26P-	Striated muscle. Colored transmission electron micrograph (TEM) of a longitudinal section through striated skeletal muscle. The striated banding- pattern of the muscle fibrils is seen. The fibrils run in parallel (from left to right) and between them runs sarcoplasmic reticulum (SR) that transmits nerve impulses to the fibrils. Here, the SR contains many mitochondria. Within each fibril are contractile units called sarcomeres separated by lines. A sarcomere has protein filaments of myosin and actin that slide over each other, thereby causing the whole muscle to contract. Skeletal muscle is responsible for voluntary muscle movement in the body. (no mag given)	Biology Media/Photo Researchers	
C203-26P-	Striated muscle. Colored transmission electron micrograph (TEM) of a longitudinal section through striated skeletal muscle. The striated banding- pattern of the muscle fibrils is seen. The fibrils run in parallel (from left to right) and between them runs sarcoplasmic reticulum (SR) that transmits nerve impulses to the fibrils. Here, the SR contains many mitochondria. Within each fibril are contractile units called sarcomeres separated by lines. A sarcomere has protein filaments of myosin and actin that slide over each other, thereby causing the whole muscle to contract. Skeletal muscle is responsible for voluntary muscle movement in the body. (no mag given)	Biology Media/Photo Researchers	

C203-27P-	Yeast cells. Coloured scanning electron micrograph (SEM) of budding yeast cells (yellow, <i>Saccharomyces cerevisiae</i>). Known as baker's or brewer's yeast, this fungus consists of single vegetative cells. The larger "mother" cells are budding off smaller daughter cells in cell division. <i>Saccharomyces cerevisiae</i> is able to ferment sugar, producing alcohol and carbon dioxide in the process. It has long been used in the brewing of beer, production of wine, and in baking leavened bread (causing the dough to rise). Magnification: x4, 750 at 5x7cm size. x12, 250 at 6.75x4.75"	Andrew Syred/Photo Researchers	
C203-27P-	Yeast cells. Coloured scanning electron micrograph (SEM) of budding yeast cells (yellow, <i>Saccharomyces cerevisiae</i>). Known as baker's or brewer's yeast, this fungus consists of single vegetative cells. The larger "mother" cells are budding off smaller daughter cells in cell division. <i>Saccharomyces cerevisiae</i> is able to ferment sugar, producing alcohol and carbon dioxide in the process. It has long been used in the brewing of beer, production of wine, and in baking leavened bread (causing the dough to rise). Magnification: x4, 750 at 5x7cm size. x12, 250 at 6.75x4.75"	Andrew Syred/Photo Researchers	
C203-28P-	Emerald Toucanet (<i>Aulacorhynchus prasinus</i>) feeding on Passionfruit (<i>Passiflora</i>) Costa Rica	Michael & Patricia Fogden/Minden Pictures	
C203-28P-	Emerald Toucanet (<i>Aulacorhynchus prasinus</i>) feeding on Passionfruit (<i>Passiflora</i>) Costa Rica	Michael & Patricia Fogden/Minden Pictures	
C203-31P-	Show a student wearing an apron and goggles seated at a lab table (desk) sketching the inside of a bean seed	Hutchings Photography/Digital Light Source	
C203-31P-	Show a student wearing an apron and goggles seated at a lab table (desk) sketching the inside of a bean seed	Hutchings Photography/Digital Light Source	
C203-32P-	student wearing an apron and goggles feeling the contents of a raw egg in a clear glass bowl.	Hutchings Photography/Digital Light Source	
C203-32P-	student wearing an apron and goggles feeling the contents of a raw egg in a clear glass bowl.	Hutchings Photography/Digital Light Source	

C203-34P-	student standing behind the lab counter wearing an apron and goggles and unwrapping a straw. On the lab counter [desk] in front of him is a small, clear plastic cup containing the prepared bromthymol blue solution.	Hutchings Photography/Digital Light Source	
C203-34P-	student standing behind the lab counter wearing an apron and goggles and unwrapping a straw. On the lab counter [desk] in front of him is a small, clear plastic cup containing the prepared bromthymol blue solution.	Hutchings Photography/Digital Light Source	
C203-35P-	close up of a student's hand holding the results of having cut the bottom end of the Elodea stem at an angle, and lightly crush that end. The hands holding the Elodea should be just above the paper towel. The scissors should be on the paper towel.	Hutchings Photography/Digital Light Source	
C203-35P-	close up of a student's hand holding the results of having cut the bottom end of the Elodea stem at an angle, and lightly crush that end. The hands holding the Elodea should be just above the paper towel. The scissors should be on the paper towel.	Hutchings Photography/Digital Light Source	
C203-36P-	student wearing an apron and goggles holding a spiral-bound notebook and pencil, as if he/she is recording data. The student is observing the setup described in step 2 and props section below. If possible, show visible bubbles in test tube.	Hutchings Photography/Digital Light Source	
C203-36P-	student wearing an apron and goggles holding a spiral-bound notebook and pencil, as if he/she is recording data. The student is observing the setup described in step 2 and props section below. If possible, show visible bubbles in test tube.	Hutchings Photography/Digital Light Source	
C203-37P-	student seated at a lab table [desk] with goggles around his/her neck. In front of the student is a compound light microscope (microscope should be using the lowest magnification) [see example right] with a slide on the stage. The student is drawing on a piece of paper. Clearly visible on the paper is "Plant Cell" and the student appears to be making his/her drawing below these words.	Hutchings Photography/Digital Light Source	

C203-37P-	student seated at a lab table [desk] with goggles around his/her neck. In front of the student is a compound light microscope (microscope should be using the lowest magnification) [see example right] with a slide on the stage. The student is drawing on a piece of paper. Clearly visible on the paper is "Plant Cell" and the student appears to be making his/her drawing below these words.	Hutchings Photography/Digital Light Source	
C203-47P-	Show a student wearing an apron and goggles standing behind a lab table [desk] and holding a spiral-bound notebook and pencil as if he/she is recording data. The student is observing three inflated balloons (labeled 1, 2 and 3-labels should be visible) sitting in clear, glass beakers on lab table [desk]. Liquids (between 50 mL and 75 mL) should be visible inside the balloons (chocolate syrup in balloon 1, orange juice in balloon 2, and a clear liquid in balloon 3).	Hutchings Photography/Digital Light Source	
C203-47P-	Show a student wearing an apron and goggles standing behind a lab table [desk] and holding a spiral-bound notebook and pencil as if he/she is recording data. The student is observing three inflated balloons (labeled 1, 2 and 3-labels should be visible) sitting in clear, glass beakers on lab table [desk]. Liquids (between 50 mL and 75 mL) should be visible inside the balloons (chocolate syrup in balloon 1, orange juice in balloon 2, and a clear liquid in balloon 3).	Hutchings Photography/Digital Light Source	
C203-48P-	Lesson 1 Minilab: PLANT MITOSIS; ALL PHASES, ONION (Allium) ROOT TIP, 200X at 35mm, Interphase, Prophase, Metaphase, Anaphase, Telophase.	Ed Reschke/Peter Arnold, Inc.	
C203-48P-	Lesson 1 Minilab: PLANT MITOSIS; ALL PHASES, ONION (Allium) ROOT TIP, 200X at 35mm, Interphase, Prophase, Metaphase, Anaphase, Telophase.	Ed Reschke/Peter Arnold, Inc.	

C203-49P-	How it Works feature - Coloured atomic force micrograph (AFM) of the surface of a nucleus showing the nuclear pore complexes (NPCs). NPCs are complexes of proteins that are embedded in the nuclear envelope. All material moving between the nucleus and the cell cytoplasm passes through these channels. They allow passive transport (diffusion) of ions and small molecules and active transport (energy dependent) of proteins and RNAs (ribonucleic acids). Magnification: x334,500 when printed at 10 centimetres tall.	VICTOR SHAHIN, PROF. DR. H.OBERLEITHNER, UNIVERSITY HOSPITAL OF MUENSTER/Photo Researchers	
C203-49P-	How it Works feature - Coloured atomic force micrograph (AFM) of the surface of a nucleus showing the nuclear pore complexes (NPCs). NPCs are complexes of proteins that are embedded in the nuclear envelope. All material moving between the nucleus and the cell cytoplasm passes through these channels. They allow passive transport (diffusion) of ions and small molecules and active transport (energy dependent) of proteins and RNAs (ribonucleic acids). Magnification: x334,500 when printed at 10 centimetres tall.	VICTOR SHAHIN, PROF. DR. H.OBERLEITHNER, UNIVERSITY HOSPITAL OF MUENSTER/Photo Researchers	
C203-50P-	How it Works feature - In this artist's concept illustration, NASA's Phoenix Mars Lander begins to shut down operations as winter sets in. The far-northern latitudes on Mars experience no sunlight during winter. This will mark the end of the mission because the solar panels can no longer charge the batteries on the lander. Frost covering the region as the atmosphere cools will bury the lander in ice.	NASA-JPL	
C203-50P-	How it Works feature - In this artist's concept illustration, NASA's Phoenix Mars Lander begins to shut down operations as winter sets in. The far-northern latitudes on Mars experience no sunlight during winter. This will mark the end of the mission because the solar panels can no longer charge the batteries on the lander. Frost covering the region as the atmosphere cools will bury the lander in ice.	NASA-JPL	
MSS12_BEAKER _100ML-MSS12P	100ml Beaker	Richard Hutchings (see Digital Light Source)	

MSS12_BEAKER_100ML-MSS12P	100ml Beaker	Richard Hutchings (see Digital Light Source)	
MSS12_CLOCK-	photograph of a clock. The photo will be a close up of a clock with a second hand. The face should be discernible and the second hand should stand out.	Hutchings Photography/Digital Light Source	
MSS12_CLOCK-	photograph of a clock. The photo will be a close up of a clock with a second hand. The face should be discernible and the second hand should stand out.	Hutchings Photography/Digital Light Source	
MSS12_ELODEA-	photograph of a sprig of Elodea	Hutchings Photography/Digital Light Source	
MSS12_ELODEA-	photograph of a sprig of Elodea	Hutchings Photography/Digital Light Source	
MSS12_GLASS_SLIDE-	A thumbnail photograph of a glass slide and a coverslip. The photo will be a close up and the background should be contrasting to show both the slide and the coverslip. The goby shows a pair of slides and a pair of coverslips.	Hutchings Photography/Digital Light Source	
MSS12_GLASS_SLIDE-	A thumbnail photograph of a glass slide and a coverslip. The photo will be a close up and the background should be contrasting to show both the slide and the coverslip. The goby shows a pair of slides and a pair of coverslips.	Hutchings Photography/Digital Light Source	
MSS12_MICROSCOPE_COMPOUND-	A thumbnail photograph of a microscope. The photo will be a close up of a student microscope.	Hutchings Photography/Digital Light Source	
MSS12_MICROSCOPE_COMPOUND-	A thumbnail photograph of a microscope. The photo will be a close up of a student microscope.	Hutchings Photography/Digital Light Source	
MSS12_SLIDE_PREP-	close up of a glass slide with a white square on one end	Hutchings Photography/Digital Light Source	
MSS12_SLIDE_PREP-	close up of a glass slide with a white square on one end	Hutchings Photography/Digital Light Source	
MSS12_TEST_TUBE-	close up of a test tube	Hutchings Photography/Digital Light Source	
MSS12_TEST_TUBE-	close up of a test tube	Hutchings Photography/Digital Light Source	
MSS12_THERMOMETER-	close up of an alcohol lab thermometer	Hutchings Photography/Digital Light Source	
MSS12_THERMOMETER-	close up of an alcohol lab thermometer	Hutchings Photography/Digital Light Source	

PM_DROPPER.PSD-XPML08	Dropper	Macmillan/McGraw-Hill	
PM_DROPPER.PSD-XPML08	Dropper	Macmillan/McGraw-Hill	
PM_FOOD_BIRD SEED.PSD-XPML08	Food BirdSeed	Macmillan/McGraw-Hill	
PM_FOOD_BIRD SEED.PSD-XPML08	Food BirdSeed	Macmillan/McGraw-Hill	
PM_FOOD_COLO RING_BLUE.PSD-XPML08	Food Coloring Blue	Macmillan/McGraw-Hill	
PM_FOOD_COLO RING_BLUE.PSD-XPML08	Food Coloring Blue	Macmillan/McGraw-Hill	
PM_LAMP_DESK.PSD-XPML08	Lamp Desk	Macmillan/McGraw-Hill	
PM_LAMP_DESK.PSD-XPML08	Lamp Desk	Macmillan/McGraw-Hill	
C13-31P-874183	Nitrogen test kit	Horizons Companies	
C260-16P-	student holding up a plastic cup filled halfway with water. The cup should have: 1) plastic wrap loosely placed on top of the cup 2) a rubber band securing the plastic wrap 3) an ice cube on top of the plastic wrap. Student should be wearing goggles and looking at the plastic wrap through the side of the cup.	Hutchings Photography/Digital Light Source	
C260-17P-	student's hands from the wrist down cupping UV reactive beads. In one hand, have the student hold several unreacted beads (they will be clear or white). In the other, have the student hold beads that have been exposed to the sun (will turn different colors depending on the brand, but will be visually distinct from the unreacted beads).	Hutchings Photography/Digital Light Source	

C260-18P-	two students facing each other at a table, both wearing goggles. The student on the left will be holding a small rubber ball around 12-14" off the top of the table. The student on the right will be holding an upright meterstick with the edge starting with the 1" measurement on the table.	Hutchings Photography/Digital Light Source	
C260-19P-	5 radish sprouts are used in this experiment. In front of the student will be 5 cups. Each cup will contain a radish sprout and a different substrate. Cup 1 will contain sand, Cup 2 contains aquarium gravel, Cup 3 contains potting soil, Cup 4 contains humus, and Cup 5 contains the sprout planted in a moist paper towel. The student will be in the process of examining the sprout in the 5th cup with a hand lens. The cups should be clear plastic so that students may see the substrate. The sprouts should be 4-5 days old.	Hutchings Photography/Digital Light Source	
C260-20P-	Science and Society feature - Twelve orbits a day provide the Mars Global Surveyor MOC wide angle cameras a global "snapshot" of weather patterns across the planet. Here, bluish-white water ice clouds hang above the Tharsis volcanoes. This computer generated image was created by wrapping the global map found atPIA02066onto a sphere. The center of this newly projected sphere is located at 15degrees North, 90 degrees West. This perspective rotates the south pole (which has no data coverage in the original map) away from our field of view.	NASA-JPL	
C260_01P-	Large dall sheep ram on top of a mountain in Kluane National Park, Yukon territory, Canada.	MICHAEL S. QUINTON/National Geographic Image Collection	000-(
C260_02P-	View of Caleta El Candelero at sunrise with Roca Monumento in distance. Isla Espiritu Santo. Sea of Cortes, Mexico.	George H.H. Huey	
C260_03P-	Jaguar (Panthera onca), drinking, Belize Zoo, Belize	Gerry Ellis/Minden Pictures/Getty Images	004-(
C260_04P-	Honey fungus Armillaria mellea mycellium on oak tree	Nigel Cattlin/Alamy	
C260_05P-	Brazil, Iguacu Falls	IIC/ Axiom/Gatty Images	
C260_06P-	Nitrogen-fixing Bacteria Rhizobium Nodules on Soybean Roots	Visuals Unlimited/CORBIS	
C260_07P-	decomposing apples	Melbourne Etc/Alamy	

C260_08P-	Lion (<i>Panthera leo</i>) stalking wildebeest (<i>Connochaetes taurinus</i>) Masai Mara National Reserve, Kenya	Art Wolfe/Getty Images	
C260_10P-	Hydrothermal vent	NOAA	
C260_11P-	panda eating bamboo	Digital Vision/PunchStock	
C260_12P-	jaguar eating	SA Team/ Foto Natura/Minden Pictures	
C260_13P-	Hispanic teen girl eats chicken sandwich outside, Santa Monica, CA	David Young-Wolff/PhotoEdit	
C260_14P-	earthworm exposed under leaf litter	Mark Steinmetz	
C260_15P-	Vulture bites at remains of dead skunk on road, Santa Barbara, CA	Colin Young-Wolff/PhotoEdit	
MSS12_BALL_PO LYSTYRENE-	A thumbnail photograph of a Styrofoam ball. The photo will be a close up and the background should be contrasting to show ball. The ball should be white in color. Size is not important, but the photo will not suggest it could not be any size.	Hutchings Photography/Digital Light Source	
MSS12_BALL_RU BBER-	A thumbnail photograph of a rubber ball. The photo will be a close up and the background should be contrasting to show ball. The ball should not have symbols, letters or other markings and should be a solid color.	Hutchings Photography/Digital Light Source	
MSS12_BEAKER _250ML-MSS12P	250ML beaker	Richard Hutchings (see Digital Light Source)	
MSS12_HAND_L ENS-	A thumbnail photograph of a hand lens. The photo will be a close up and the background should be contrasting to show the hand lens.	Hutchings Photography/Digital Light Source	
MSS12_METER_ STICK-	A thumbnail photograph of a meterstick. The photo will be a close up and the focus should be close enough to show markings on the face, but not such that the numbers are discernible. The meterstick could be wood or plastic, but should be one full meter in length. One of each material in a side by side is a potential alternative.	Hutchings Photography/Digital Light Source	
MSS12_PAPER_T OWEL_ROLL-	A thumbnail photo to show a paper towel roll. The roll should be standing on one end and should be plain white. Silo	Hutchings Photography/Digital Light Source	
MSS12_POTTING MEDIA-	A thumbnail photo to show white sand, aquarium gravel, potting soil and humus. The individual materials should be in a cone-shaped piles arranged neatly and separate.	Hutchings Photography/Digital Light Source	

MSS12_RADISH SEEDS-	A thumbnail photograph of a radish seed package. Lay a few seeds on a damp paper towel until they sprout, then lay a few seedlings on a filter paper circle beside the packet. The photo will be a close up and the background should be contrasting to show the packet and seedlings	Hutchings Photography/Digital Light Source	
MSS12_RULER-PM_MARKER_WATERPROOF.PSD-XPML08	A thumbnail photograph of a plastic metric ruler. The photo will be a close up and the background should be contrasting to show the markings of the ruler. The markings do not have to be discernible. The ruler should have a groove down the center. Marker Waterproof	Hutchings Photography/Digital Light Source Macmillan/McGraw-Hill	
C340-01P-	Hoh Rainforest trail with visitor, Olympic National Park, Washington□	Jean-Paul Ferrero/Minden Pictures	00-01
C340-01P--A	Hoh Rainforest trail with visitor, Olympic National Park, Washington□	Jean-Paul Ferrero/Minden Pictures	
C340-02P-	A form of carbon The brilliant hard diamond is formed under conditions of vast pressure and heat deep within the earth	The Natural History Museum / Alamy	
C340-03P-	coral reef and scuba diver□	Wolfgang Pölzer / Alamy	
C340-04P-	Extreme close-up of sharpened pencil point with small sharpener out-of-focus against a white background	Image Source / Getty Images	
C340-05P-	Solitaire Diamond	Image Source / Getty Images	
C340-06P-	Pile of coal, close-up□	Michael Betts/Getty Images	
C340-07P-	Close up of Puss moth caterpillar (Cerura vinula) feeding on Goat willow, UK□	Kim Taylor/Minden Pictures	
C340-08P-	Heavy fight between army ant soldier, (Eciton burchelli) and bullet ant, (Paraponera clavata).□	Francesco Tomasinelli / Photo Researchers, Inc.	
C340-09P-	Close up of pickles in jars□	Jamie Grill/Getty Images	
C340-100P-	Lesson 1 launch. 2 students at a table putting gumdrops & toothpicks together to illustrate the ways 4 carbon atoms can bond	Hutchings Photography/Digital Light Source	
C340-101P-	Lesson 2 launch. Student dipping a pipe cleaner wand into a clear plastic cup containing water & rubbing alcohol to illustrate part of the procedure in the lab	Hutchings Photography/Digital Light Source	

C340-102P-	Lesson 3 launch. Student filtering a glass of milk/vinegar mixture to illustrate the changing structure of a protein	Hutchings Photography/Digital Light Source	
C340-103P-	Lesson 1 mini lab. Student constructing a model of pentane using gumdrops, raisings & toothpicks to illustrate how carbon can form single, double or triple bonds	Hutchings Photography/Digital Light Source	
C340-104P-	Lesson 2 mini lab. Student pouring borax laundry soap into a clear plastic glass of water, to illustrate a lab step	Hutchings Photography/Digital Light Source	
C340-105P-	Skills lab. Student adding a vitamin C indicator solution (blue water) to test tubes containing different liquids to illustrate a lab step. On location	Hutchings Photography/Digital Light Source	
C340-106P-	EOC inquiry. Student adding blue solution to a test tube of milk to illustrate a lab step. On location	Hutchings Photography/Digital Light Source	
C340-10P-	A sign, required by law, warns of a pesticide application of methyl bromide on a field near Watsonville, Calif., Aug. 12, 2005. The pesticide is used to fumigate the soil as preparation for strawberry planting. The U.S. continues to permit the methyl bromide to be used despite signing an international treaty banning all but the most critical uses by 2005. Its survival demonstrates the difficulty of banishing a chemical that is a powerful toxin but that also helps deliver abundant, pest-free and affordable produce for farmers and consumers.	AP Photo/Rita Beamish	
C340-11P-	Swiss cheese	Image Source / Getty Images	
C340-11P--A	Swiss cheese	Image Source / Getty Images	
C340-13P-	table 6. Bales of hay, protected by plastic sheeting, await collection in a field.□	Andy Hibbert; Ecoscene/CORBIS	
C340-14P-	table 6. PVC pipes in stacks	Image Source / Getty Images	
C340-15P-	table 6. Teflon non-stick coating on frying pan. This coating made of polytetrafluoroethylene has low surface friction.□	Leonard Lessin / Photo Researchers, Inc.	
C340-16P-	table 6. Australian Dollar Notes□	Glyn Thomas / Alamy	
C340-17P-	A mountain biker and his dog enjoy one of the raised boardwalk trails at Haldon Forest Park near Exeter, Devon	Seb Rogers / Alamy	
C340-19P-	fig 14 Close-up view of a bowl of fresh fruits against a white background	Image Source / Getty Images	

C340-20P-	fig 14 Bag of sugar with a scoop	Brian Hagiwara/Jupiter Images	
C340-21P-	First commercial silicon transistor	Courtesy of Texas Instruments	
C340-22P-	Original caption: The tridac control panel for the gigantic calculating machine which has been installed by the British Ministry of Supply at the Royal Aircraft Establishment in Farnborough. It is called "TRIDAC" (Three Dimensional Computer) and is the biggest electronic "brain" in Britain and among the biggest in the world. It will be used to help with the design of radar equipment, high speed aircraft and guided missiles. Equipment that comprises the "brain" would fill six ordinary three bedroom houses. The electric power used by the machine would light a small town. October 9, 1954	Bettmann/CORBIS	
C340-23P-	Close-up view of a blue circuit board negative featuring covered wires	Digital Vision/Getty Images	
C340-24P-	Michela Alioto, a paraplegic, plays video games with friends on her bedroom computer. Another computer in the home runs the software used during her physical therapy. September 24, 1983	Roger Ressmeyer/CORBIS	
C340-25P-	Nanotube	Digital Art/Corbis	
MSS12_BEAKER_500ML-MSS12P	MSS12_BEAKER_500ML	Richard Hutchings (see Digital Light Source)	
MSS12_FOOD_LIQUIDS-MSS12P	Food, liquids	Richard Hutchings (see Digital Light Source)	
MSS12_FOOD_SOLIDIS-MSS12P	Foods, solids	Richard Hutchings (see Digital Light Source)	
MSS12_GRADUATED_CYLINDER_100ML-MSS12P	100ML graduated cylinder	Richard Hutchings (see Digital Light Source)	
MSS12_SOLUTIONS_INDICATOR-MSS12P	Bottles of solution indicators	Richard Hutchings (see Digital Light Source)	
MSS12_SOLUTIONS_INDICATOR-MSS12P	Bottles of solution indicators	Hutchings Photography/Digital Light Source	

MSS12_SOLUTIONS_TEST-MSS12P	3 solutions in labeled 250mL beakers to contain (half full): Starch solution, protein solution, lipid solution	Hutchings Photography/Digital Light Source	
MSS12_TEST_TUBE_RACK_FILLER-MSS12P	Wooden Test Tube Rack filled with 10 empty test tubes.	The McGraw-Hill Companies	
MSS12_VITAMIN_C_SOLN-MSS12P	Vit C Solution in beaker	Richard Hutchings (see Digital Light Source)	
MSS12_WATER_DISTILLED-MSS12P	Distilled water	Richard Hutchings (see Digital Light Source)	
MSS12_WATER_DISTILLED-MSS12P	Distilled water	Hutchings Photography/Digital Light Source	
PM_CONTAINER_MILKCRW.PSD-XPML08	Container MilkCRW	Macmillan/McGraw-Hill	
PM_DROPPER.PSD-XPML08	Dropper	Macmillan/McGraw-Hill	
C361-02P-	Lesson 1 Opener-People playing with a fairground attraction, game	Hill Street Studios/Getty Images	
C361-03P-	figure 1. Teenagers Playing an Arcade Game in an Amusement Arcade	Nancy Ney/Getty Images	
C361-04P-	Figure 6-A biologist attaches a satellite collar to a tranquilized polar bear.	PAUL NICKLEN/National Geographic Stock	
C361-05P-	Lesson 2 Opener-The collision of a tennis racket with the ball shows compression of the ball as well as stretching of the strings.	Visuals Unlimited/Corbis	
C361-06P-	figure 9. Person pressing return button on computer keypad, close-up	Anthony-Masterson/Getty Images	
C361-07P-	figure 10. Chef punching dough	Visual Cuisines/Getty Images	
C361-08P-	figure 11. Baseball player sliding into third base with umpire behind him and fielder in process of catching ball.	David Madison/Getty Images	
C361-09P-	Lesson 3 Opener-Carnival Ride at Strawberry Festival Plant City Florida FL FLA USA US	imac/Alamy	

C361-100P-	2nd phase. Lesson 1 launch. Two students sitting at a table, a sheet of paper in front of one student and the student is holding a pencil and is looking at the second student. The second student is holding a ball about 30 cm above a table	Hutchings Photography/Digital Light Source	
C361-101P-	2nd phase lesson 1 mini lab. Student holding one-hole stopper tied to a string. Student is twirling stopper in horizontal circle in front of legs	Hutchings Photography/Digital Light Source	
C361-102P-	2nd phase. lesson 2 launch. Student sitting at a table holding a handful of modeling clay	Hutchings Photography/Digital Light Source	
C361-103P-	2nd phase. Lesson 2 Mini lab. Student's hand holding a model parachute	Hutchings Photography/Digital Light Source	
C361-104P-	2nd phase. Lesson 2 skill lab. Block of wood sitting on table with sandpaper taped to the table. String attached to block at one end and 5-N spring scale at the other	Hutchings Photography/Digital Light Source	
C361-105P-	2nd phase. Lesson 3 launch. Index card on a jar with a penny on top and a hand about to flick it	Hutchings Photography/Digital Light Source	
C361-106P-	2nd phase. Lesson 3 mini lab. Large test tube taped to a block. Test tube is half full of green water. Stopper is in test tube. Block has a thumb tack in its end and a 20 cm string is attached at one end to the thumb tack	Hutchings Photography/Digital Light Source	
C361-107P-	2nd phase. EOC. Two students who appear to be just starting to build a model ferris wheel	Hutchings Photography/Digital Light Source	
C361-108P-	2nd phase. EOC. Two students beginning to build a model amusement park game	Hutchings Photography/Digital Light Source	
C361-10P-	figure 16 combo C361-19A Power Tower freefall ascending falling vertigo G force travelling fair funfair fairground excitement joy motion gravity thrill	Bernd Mellmann / Alamy	
C361-11P-	Figure 17: Combo C361-20A, 25P. Hen party bungee trampoline Cardiff Bay Wales	camera lucida lifestyle / Alamy	
C361-12P-	An amusement park ride at the ocean shore.	Richard Green / Alamy	
C361-13P-	carnival bottle game	skip caplan / Alamy	
C361-14P-	Young man driving bumper car into friend's car (blurred motion)	Uwe Krejci/Getty Images	
C361-15P-	Front view of two soccer players heading the ball	The McGraw-Hill Companies, Inc./jill Braaten, photographer	
C361-16P-	High angle view of a bowl of apples on the table	DEX IMAGE/Getty Images	

C361-17P-	During the Gemini 4 mission on June 3, 1965, Ed White became the first American to conduct a spacewalk. The spacewalk started at 3:45 p.m. EDT on the third orbit when White opened the hatch and used the hand-held maneuvering oxygen-jet gun to push himself out of the capsule.	NASA	
C361-19P-	figure 9 female road cyclist	Per Breiehagen/Getty Images	
C361-20P-	figure 10. Rehabilitation with Thera Bands	Photodisc / Alamy	
C361-21P-	figure 10. Young Woman Practicing on Pommel Horse	Floresco Productions/Corbis	
C361-22P-	figure 10. Girl with static electricity in her hair on slide	Mark Spowart / Alamy	
C361-23P-	figure 10. like poles of suspended magnets repel	sciencephotos / Alamy	
C361-24P-	figure 10. Two young men diving off rock into sea, mid-air, rear view	Steve Casimiro/Getty Images	
C361-25P-	Figure 17: Combo C361-20A, 11P Hen party bungee trampoline Cardiff Bay Wales	camera lucida lifestyle / Alamy	
C361-26P-	figure 16 combo C361-19A Power Tower freefall ascending falling vertigo G force travelling fair funfair fairground excitement joy motion gravity thrill	Bernd Mellmann / Alamy	
C361-27P-	Senior couple walking on the beach	Masterfile	
C361-28P-	An English Bulldog skateboarding.	Nikki O'Keefe Images/Getty Images	
C361-29P-	2nd phase chapter opener. Russian acrobats of the Cirque du Soleil rehearse a scene 09 May 2007	AFP/Getty Images	00-01
MSS12_BALL_TENNIS-MSS12P	Tennis ball	Hutchings Photography/Digital Light Source	
MSS12_BOARD_50X15-MSS12P	Wooden board	Hutchings Photography/Digital Light Source	
MSS12_SANDPAPER-MSS12P	Sandpaper	Hutchings Photography/Digital Light Source	
MSS12_SCALE_TRIPLE-	Triple beam scale	Hutchings Photography/Digital Light Source	
MSS12_SPRING_SCALE_5N-MSS12P	Spring scale, 5 Newtons	Hutchings Photography/Digital Light Source	
MSS12_STRING-MSS12P	Ball of string	Hutchings Photography/Digital Light Source	

MSS12_TAPE_M ASKING-MSS12P	Masking tape	Hutchings Photography/Digital Light Source	
MSS12_TUBING _FOAM-MSS12P	Grey foam pipe insulation tubing, cut lengthwise.	The McGraw-Hill Companies	
PM_RUBBERBAN D_MEDIUM.PSD- XPML08	RubberBand Medium	Macmillan/McGraw-Hill	
C353-01P-	Chapter Opener - The Bow of the sailboat tilts on these rough seas.	Jan & Rhys Hanna/Getty Images	00-01
C353-02P-	Robots manufacturing cars on a production line. Location: ENGLAND	Giles Barnard/photolibrary.com	
C353-03P-	The developing International Space Station (ISS) has changed its appearance again. Over the past few days, the Space Shuttle Atlantis visited the ISS and added pieces of the Integrated Truss Structure, including an impressively long array of solar panels. These expansive solar panels are visible extending from the lower right of the above image taken by the Shuttle Atlantis Crew after leaving the ISS to return to Earth. The world's foremost space outpost can be seen developing over the past several years by comparing the above image to past images. Also visible above are many different types of modules, a robotic arm, another impressive set of solar panels, and a supply ship. Construction began on the ISS in 1998.	NASA	
C353-04P-	SA, California, Altamont, rows of wind turbines	Glen Allison/Getty Images	
C353-05P-	Original caption: Washington: A view of the Grand Coulee Dam in Washington State. □	Bettmann/CORBIS	
C353-06P-	Coal Power Plant Emitting Steam. San Juan County, New Mexico, USA	San Juan County, New Mexico, USA	
C353-07P-	Lump of Coal	Photodisc / Getty Images	
C353-08P-	atomic power plant Grafenrheinfeld, Bavaria, Germany	euroluftbildd euroluftbildd/photolibrary.com	

C353-09P-	Nuclear fuel pellets. These pellets are made from uranium dioxide. The pellets will be loaded into fuel rods and then used in a nuclear reactor to create a controlled nuclear reaction and generate electricity. These pellets were produced at the Novosibirsk Chemical Concentrate Works, Russia. Novosibirsk is in southern Siberia, near Russia's border with Central Asia. Photographed on 17 August 2006.□	RIA Novosti / Photo Researchers, Inc.	
C353-100P-	2nd phase. Lesson 1 launch. Student observing a lit birthday candle stuck into a small blob of salt dough on the tabletop	Hutchings Photography/Digital Light Source	
C353-101P-	2nd phase L2 launch. Student about to release marble from top of foam pipe insulation track. End is taped to wall 1m above ground, other end is taped to chair. 2nd student holding meter stick at chair end to measure ht marble rises	Hutchings Photography/Digital Light Source	
C353-102P-	2nd phase. Bet. 2-3 class periods. two students about to ĳraceĳ their cars. One student has a balloon-powered car and the other student a rubber-band powered car	Hutchings Photography/Digital Light Source	
C353-104P-	2nd phase Description: setup photo of pine board with one eyehook screwed in as far as it will go. Student has a second eyehook started and has place a pencil through the hole. Student is starting to rotate the pencil.	Hutchings Photography/Digital Light Source	
C353-105P-	2nd phase. Lesson 3 minilab. pine board with one eyehook screwed in as far as it will go. Student has a second eyehook started and has place a pencil through the hole. Student is starting to rotate the pencil	Hutchings Photography/Digital Light Source	
C353-106P-	2nd phase. EOC. students building a car made of a plastic water bottle with the axle running through the bottle as shown in the go-by	Hutchings Photography/Digital Light Source	
C353-107P-	2nd phase. EOC. Use 2 cars built for skill lab & car built for this lab. car built for this lab is powered by a string attached to dropping washers. Have 3 cars set for race. student should be behind each car performing final preps for race	Hutchings Photography/Digital Light Source	
C353-10P-	Wind energy research at the National Renewable Energy Laboratory's Wind Technology Center□	Jim West / Alamy	

C353-11P-	Steam from Hitaveita Sudurnesja geothermal power plant, Blue Lagoon geothermal hot spring in background, Iceland□	ARCTIC IMAGES / Alamy	
C353-12P-	Fringe-lipped Bat (Trachops cirrhosus) swooping in on Mexican White-lipped Frog (Leptodactylus fragilis) on log (1 of 3)	Carol Farneti Foster/OSF/photolibrary.com	
C353-13P-	House Destroyed in Earthquake□A house lies in ruins, destroyed by the Loma Prieta earthquake. October 18, 1989. Marina District, San Francisco, California, USA	Roger Ressmeyer/CORBIS	
C353-14P-	Ashiya University Solar Car Project A team's solar car Sky Ace TIGA (right bottom) leads Osaka Sangyo University's OSU model S' (centre bottom) and Australia's Aurora Vehicle Association Inc team's Aurora 101 (above Ashiya University) after the start of the second day of eight-hour endurance final of the Dream and Challenge category of Federation Internationale del'Automobile (FIA) Alternative Energies Cup and Dream Cup solar car race Suzuka 2005 at Suzuka Circuit, central Japan August 7, 2005. Ashiya University team won the final in 103 laps with a time of eight hours four minutes 20.352 seconds, OSU placed second in 101 laps with a time of eight hours five minutes 53.895 seconds and Aurora Vehicle Association placed third in same laps with a time of eight hours nine minutes 24.657 seconds.	REUTERS/Kimimasa Mayama /Landov	

C353-14P--A	Ashiya University Solar Car Project A team's solar car Sky Ace TIGA (right bottom) leads Osaka Sangyo University's OSU model S' (centre bottom) and Australia's Aurora Vehicle Association Inc team's Aurora 101 (above Ashiya University) after the start of the second day of eight-hour endurance final of the Dream and Challenge category of Federation Internationale del'Automobile (FIA) Alternative Energies Cup and Dream Cup solar car race Suzuka 2005 at Suzuka Circuit, central Japan August 7, 2005. Ashiya University team won the final in 103 laps with a time of eight hours four minutes 20.352 seconds, OSU placed second in 101 laps with a time of eight hours five minutes 53.895 seconds and Aurora Vehicle Association placed third in same laps with a time of eight hours nine minutes 24.657 seconds.	REUTERS/Kimimasa Mayama /Landov	
C353-15P-	A baby zebra keeps warm with the aid of a heat lamp at Duane Gilbert's ranch Thursday, March 9, 2006, in Castle Dale, Utah. Gilbert is the only registered zebra breeder in the state and one of just a few in the country.	AP Photo/Douglas C. Pizac	
C353-16P-	Infusion roller coaster	Shenval/Alamy Images	
C353-17P-	Agriculture - Field of mature broccoli ready for harvest showing a head of broccoli in the foreground / Santa Maria Valley, California, USA	Tony Hertz/age fotostock	
C353-18P-	Racecar racing on a motor racing track□	Glowimages/Getty Images	
C353-19P-	Unicycler riding off road in mountain scenery.□	Joe McBride/Getty Images	
C353-20P-	Orange Soda with bottle opener	Lew Robertson/Getty Images	
C353-21P-	Young couple moving boxes out of moving truck□	Drive Images / Alamy	
C353-22P-	Close-up of hand opening bottle	Marc Volk/photolibrary.com	
C353-23P-	Man cutting pizza	VStock LLC/age fotostock	
C353-24P-	Extreme close-up of woman opening canned drink, focus on foreground□	Medioimages/Photodisc/Getty Images	
C353-25P-	Man using screwdriver	Polka Dot Images / photolibrary.com	
C353-26P-	A single pulley system pulling a 10 newton load.	Dorling Kindersley	
C353-27P-	Side view of a vintage bicycle against a white background	Brand X Pictures	
C353-28P-	Hands of woman frying egg□	Thinkstock/Getty Images	
C353-30P-	Cloudy sky. Bigwheel of fair near canal. Weterpark Kermis. Amsterdam. Holland.	CMB/age fotostock	

C353-31P-	Woman's hand uses screwdriver as lever to pry open can of paint	Eric Fowke / PhotoEdit	
C353-50P-	Sonnenenergie - solar power panels on a roof	Dieter Möbus/age fotostock	
C353-51P-	Sunlight shining on solar panels on a clear bright day	Getty Images	
MSS12_ANTACIDS_VARIETY-MSS12P	MSS12_ANTACIDS_VARIETY	The Mcgraw-Hill Companies	
MSS12_CARDBOARD-MSS12P	Sheets of cardboard	Hutchings Photography/Digital Light Source	
MSS12_OFFICE_SUPPLIES-MSS12P	Shot of transparent tape, stapler, scissors, ruler, paper clips, push pins, rubber bands, and 1 hole punch.	The Mcgraw-Hill Companies	
MSS12_RUBBER_BANDS-MSS12P	Pile pf 20+ rubber bands varying in sizes and thickness	The Mcgraw-Hill Companies	
MSS12_SKEWER_WOODEN-MSS12P	skewer wooden	Hutchings Photography/Digital Light Source	
MSS12_TAPE_MASKING-MSS12P	Masking tape	Hutchings Photography/Digital Light Source	
MSS12_WASHERS_METAL-MSS12P	8-10 metal washers	The Mcgraw-Hill Companies	
PM_BAKING_SODA.PSD-XPML08	Baking Soda	Macmillan/McGraw-Hill	
PM_BOTTLE_PLASTIC_16OZ.PSD-XPML08	Bottle Plastic 16oz	Macmillan/McGraw-Hill	
PM_FOOD_VINEGAR.PSD-XPML08	Food Vinegar	Macmillan/McGraw-Hill	
PM_METERSTICK.PSD-XPML08	Meterstick	Macmillan/McGraw-Hill	

C163-01P-	Melting water streams from iceberg calved from Ilulissat Kangerlua Glacier (Jakobshavn Icefjord) in Disko Bay	Paul Souders/CORBIS	
C163-02P-	Antarctic Landing Field of Terra Nova	Yann Arthus-Bertrand/CORBIS	
C163-03P-	Glacier, Aerial View Kluane National Park, Yukon, Canada	Ron Watts/Getty Images	
C163-05P-	Sea Ice, Arctic Ocean Nunavut, Canada	Janet Foster/Masterfile	
C163-06P-	Extracting an ice core sample which has just been cut from the ice cap.	Nick Cobbing/Alamy	
C163-07P-	Photo taken in 1993 shows a glaciologist removing a core ice to study the chemical make-up of its body dating back to 1840, and to provide the first long-term record of sustained decline in Antarctic ice, in Law Dome Camp, Antarctica. Australian researcher	VIN MORGAN/AFP/Getty Images	
C163-08P-	Ice crystals in a core reflect colors at different angles, Mount Logan, Kluane National Park, Yukon Territory, Canada	National Geographic/Getty Images	
C163-09P-	Muir Glacier, 1941	William O. Field, National Snow and Ice Data Center	
C163-100P-	Student performing lab with food coloring	Hutchings Photography/Digital Light Source	
C163-101P-	Lamp aimed at thermometers	Hutchings Photography/Digital Light Source	
C163-102P-	Student lab, pouring water	Hutchings Photography/Digital Light Source	
C163-103P-	Stream table lab	Hutchings Photography/Digital Light Source	
C163-104P-	Eggs dropping into jar	Hutchings Photography/Digital Light Source	
C163-108P-	The biomass byproduct of bioremediation floats in the lagoon at the French Limited superfund site July 1, 1993 in Houston, TX. An industrial waste facility where oils, grease, acids and solvents were dumped for five years, the French Limited superfund site is being treated for toxins through bioremediation, which uses naturally-occurring bacteria that digest toxic sludge.	Paul S. Howell/Liaison/Getty Images	
C163-109P-	Stream table lab 2	Hutchings Photography/Digital Light Source	
C163-10P-	(DAL) Aerial View of Hoover Dam, Nevada	ThinkStock/SuperStock	
C163-111P-	Student scooping sand	Hutchings Photography/Digital Light Source	

C163-12P-	Soil erosion on a farm in Arkansas.	Garry McMichael/Photo Researchers, Inc.	
C163-13P-	A stream bed with green beech trees in Prien valley near Aschau, Chiemgau, Upper Bavaria, Bavaria, Germany	Andreas Strauss/Getty Images	
C163-14P-	LESSON 3 OPENER: A freshwater mound spring bubbles up through an arid desert plain	Jason Edwards/Getty Images	
C163-15P-	(DAL) Grassy Pond	Brand X Pictures/PunchStock	
C163-16P-	Bald cypress trees (<i>Taxodium distichum</i>) growing in algae-covered Heron Pond, Cache River State Natural Area, Illinois, USA.	Panoramic Images/Getty Images	
C163-17P-	An undisturbed natural New England bog. A thirty-foot thick mat of sphagnum moss floats on acidic stagnant water.	Custom Life Science Images/Alamy	
C163-19P-	Snow Geese, Bosque del Apache National Wildlife Refuge, New Mexico, USA	Frank Krahmer/Masterfile	
C163-21P-	Aerial View of an Everglades Housing Development	Kevin Fleming/CORBIS	
C163-23P-	Muir Glacier, 2004	Bruce F. Molnia, U.S. Geological Survey	
C163-24P-	CHAPTER OPENER: USA, Minnesota, view of Mississippi River from Great River Bluffs State Park, southeast of river town of Winona.	Jon Spaul//Getty Images	00-01
C163-26P-	feature: Comparative satellite images of Arctic, 1979	NASA/Goddard Space Flight Center Scientific Visualization Studio Thanks to Rob Gerston (GSFC) for providing the data.	
C163-27P-	feature: Polar bear walking	Creatas/PunchStock	
C163-28P-	feature: Comparative satellite images of Arctic, 2007	NASA/Goddard Space Flight Center Scientific Visualization Studio Thanks to Rob Gerston (GSFC) for providing the data.	
C163-40P-	Polar Bear on ice flow, Arctic. (Lesson 1 Opener in Louisiana State Edition)	Rinie Van Meurs/Foto Natura/Getty Images	
MSS12_FOOD_COLORING-	vegetable dye	Hutchings Photography/Digital Light Source	
MSS12_MILK_JUG-MSS12P	Milk jug	Hutchings Photography/Digital Light Source	
MSS12_MILK_JUG-MSS12P	Milk jug	Hutchings Photography/Digital Light Source	
MSS12_PAPER_TOWEL_ROLL-	A thumbnail photo to show a paper towel roll. The roll should be standing on one end and should be plain white. Silo	Hutchings Photography/Digital Light Source	

MSS12_PAPER_T OWEL_ROLL-	A thumbnail photo to show a paper towel roll. The roll should be standing on one end and should be plain white. Silo	Hutchings Photography/Digital Light Source	
MSS12_PENCIL ROUND_ERASER- MSS12P	round pencil with eraser (not traditional hexagonal pencil)	Hutchings Photography/Digital Light Source	
MSS12_STREAM _TABLE-MSS12P	Stream table	Hutchings Photography/Digital Light Source	
MSS12_STREAM _TABLE-MSS12P	Stream table	Hutchings Photography/Digital Light Source	
MSS12_TUB- MSS12P	Tub (dish basin)	Hutchings Photography/Digital Light Source	
MSS12_TUB- MSS12P	Tub (dish basin)	Hutchings Photography/Digital Light Source	
PM_SAND_FINE. PSD-XPML08	Sand Fine	Macmillan/McGraw-Hill	
C192-01P-	Chapter Opener: Since April of 2006, NASA's Mars Exploration Rover Spirit has been sojourning in a place called "Winter Haven," where the robotic geologist spent several months parked on a north-facing slope in order to keep its solar panels pointed toward the sun. During that time, while the rover spent the daylight hours conducting as much scientific research as possible, science team members assigned informal names to rock outcrops, boulders, and patches of soil commemorating exploration sites in Antarctica and the southernmost islands of South America. Antarctic bases are places where researchers, like the rovers on Mars, hunker down for the winter in subzero temperatures. During the past Martian winter, Spirit endured temperatures lower than minus 100 degrees Celsius (minus 148 degrees Fahrenheit). (22348x 5771 - cropped portion)	Cornell University/JPL/NASA	00-01
C192-02P-	Hoba meteorite, Otavidreieck, Namibia	Scholz, F./Peter Arnold Inc.	

C192-03P-	Dark nebula B68. Optical image of Barnard 68, a dark nebula of gas and dust. The nebula is so dense that it obscures the light from stars behind it. It is thought such nebulae are precursors of stellar formation. B68 is 500 light years from Earth in the constellation Ophiuchus. This image was made with the 8.2-meter Very Large Telescope "Antu" at the Cerro Paranal Observatory, Chile.	European Southern Observatory / Photo Researchers, Inc.	
C192-04P-	Asteroid Ida and its moon Dactyl. Scientists found the moon - the first discovered orbiting an asteroid - when the Galileo spacecraft flew past Ida in 1994.	NASA, Jet Propulsion Laboratory	
C192-05P-	View of Halley's comet	NASA	
C192-06P-	Methane Ice Worm Date: 1 Jul 1997 Scientists discovered this new kind of centipede-like worm in 1997 living on and within mounds of methane ice on the floor of the Gulf of Mexico, about 150 miles south of New Orleans. Although scientists had hypothesized that bacteria might colonize methane ice mounds, called gas hydrates, this is the first time animals have been found living in the mounds. The discovery of dense colonies of these one-to-two-inch-long, flat, pinkish worms burrowing into a mushroom-shaped mound of methane seeping up from the sea floor raises speculation that the worms may be a new species with a pervasive and as yet unknown influence on these energy-rich gas deposits. The worms were observed using their two rows of oar-like appendages to move about the honeycombed, yellow and white surface of the icy mound. The researchers speculate that the worms may be grazing off chemosynthetic bacteria that grow on the methane or are otherwise living symbiotically with them. "The old view that the deep sea bottom is a monotonous habitat needs to be discarded. These worms	NOAA/NASA	

C192-07P-	Deep ocean fish swimming among giant tube worms (<i>Riftia pachyptila</i>) by a hydrothermal vent. Many deep ocean fish are new, previously unknown, species. The tube worms are marine invertebrates that are a key part of the ecosystem of deep ocean hydrothermal vents. They can tolerate high temperatures, and obtain nutrients from the water by symbiosis with bacteria living in their bodies. The white tubes are made of chitin. The red structures, called plumes, contain haemoglobin that combines with the hydrogen sulphide and transfers it to the bacteria. The bacteria then convert the inorganic chemicals to organic molecules that are used by the tube worms. Photographed on the East Pacific Rise.	DR KEN MACDONALD/SCIENCE PHOTO LIBRARY	
C192-08P-	False-color image of gully channels in a crater in the southern highlands of Mars, taken by the High Resolution Imaging Science Experiment (HiRISE) camera on the Mars Reconnaissance Orbiter. The gullies emanating from the rocky cliffs near the crater's rim (upper left) show meandering and braided patterns typical of water-carved channels. North is approximately up and illumination is from the left; scale, 26 centimeters per pixel.	NASA/JPL/University of Arizona	
C192-100P-	Balloons in fish tank lab	Hutchings Photography/Digital Light Source	
C192-101P-	Student holding plumb-bob	Hutchings Photography/Digital Light Source	
C192-102P-	Cardboard disk	Hutchings Photography/Digital Light Source	
C192-103P-	Student using hot plate	Hutchings Photography/Digital Light Source	
C192-104P-	Student looking at worksheet	Hutchings Photography/Digital Light Source	
C192-105P-	Students working with legos	Hutchings Photography/Digital Light Source	
C192-106P-	Student(s) with masking tape circles and shuttle model	Hutchings Photography/Digital Light Source	
C192-107P-	Three student lab, cotton balls	Hutchings Photography/Digital Light Source	
C192-108P-	Students dropping balloon apparatus	Hutchings Photography/Digital Light Source	

C192-10P-	Cassini images of Saturn's moon Enceladus backlit by the sun show the fountain-like sources of the fine spray of material that towers over the south polar region. Nov. 28, 2005	NASA/JPL/Space Science Institute	
C192-11P-	This close-up of astronaut and mission specialist, Kathryn Thornton, was captured under water in the Marshall Space Flight Center (MSFC) Neural Buoyancy Simulator (NBS) where she is participating in a training session for the STS-61 mission. The NBS provided the weightless environment encountered in space needed for testing and the practices of Extravehicular Activities (EVA). Launched on December 2, 1993 aboard the Space Shuttle Orbiter Endeavor, STS-61 was the first Hubble Space Telescope (HST) serving mission. During the 2nd EVA of the mission, Thornton, along with astronaut and mission specialist Thomas Akers, performed the task of replacing the solar arrays. The EVA lasted 6 hours and 35 minutes.	NASA	
C192-12P-	Space Launch	StockTrek/Getty Images	
C192-13P-	Astronaut on first untethered Space walk	Adastra/Getty Images	
C192-14P-	S114-E-7138 (5 August 2005) --- Astronaut Eileen M. Collins, STS-114 commander, waves while floating in the Zvezda Service Module of the international space station while Space Shuttle Discovery was docked to the station.	NASA	
C192-15P-	JSC2006-E-43519 (October 2006) --- Computer-generated artist's rendering of the completed International Space Station.	NASA	
C192-16P-	ISS016-E-008792 (2 Nov. 2007) --- European Space Agency (ESA) astronaut Paolo Nespoli, STS-120 mission specialist, rests in his sleeping bag in the Harmony node of the International Space Station while Space Shuttle Discovery is docked with the station.	NASA	

C192-18P-	<p>The NASA developed Ares rockets, named for the Greek god associated with Mars, will return humans to the moon and later take them to Mars and other destinations. In this early illustration, the Ares I is illustrated during lift off. Ares I is an inline, two-stage rocket configuration topped by the Orion crew vehicle and its launch abort system. With a primary mission of carrying four to six member crews to Earth orbit, Ares I may also use its 25-ton payload capacity to deliver resources and supplies to the International Space Station (ISS), or to "park" payloads in orbit for retrieval by other spacecraft bound for the moon or other destinations. Ares I uses a single five-segment solid rocket booster, a derivative of the space shuttle solid rocket booster, for the first stage. A liquid oxygen/liquid hydrogen J-2X engine, derived from the J-2 engine used on the second stage of the Apollo vehicle, will power the Ares I second stage. Ares I can lift more than 55,000 pounds to low Earth orbit. The Ares I is subject to configuration changes before it is actually launched. This</p>	NASA	
C192-19P-	View of the launch of Mercury-Atlas 4 spacecraft from Cape Canaveral on Sept. 13, 1961.	NASA Johnson Space Center Collection	
C192-20P-	<p>NASA successfully completed its first rendezvous mission with two Gemini spacecraft-Gemini VII and Gemini VI-in December 1965. This photograph, taken by Gemini VII crewmembers Frank Lovell and Frank Borman, shows Gemini VI in orbit 160 miles (257 km) above Earth. The main purpose of Gemini VI, crewed by astronauts Walter Schirra and Thomas Stafford, was the rendezvous with Gemini VII. The main purpose of Gemini VII, on the other hand, was studying the long-term effects of long-duration (up to 14 days) space flight on a two-man crew. The pair also carried out 20 experiments, including medical tests. Although the principal objectives of both missions differed, they were both carried out so that NASA could master the technical challenges of getting into and working in space.</p>	NASA Great Images in Nasa Collection	

C192-21P-	<p>The second manned lunar landing mission, Apollo 12, launched from launch pad 39-A at Kennedy Space Center in Florida on November 14, 1969 via a Saturn V launch vehicle. The Saturn V vehicle was developed by the Marshall Space Flight Center (MSFC) under the direction of Dr. Wernher von Braun. Aboard Apollo 12 was a crew of three astronauts: Alan L. Bean, pilot of the Lunar Module (LM), Intrepid; Richard Gordon, pilot of the Command Module (CM), Yankee Clipper; and Spacecraft Commander Charles Conrad. The LM, Intrepid, landed astronauts Conrad and Bean on the lunar surface in what's known as the Ocean of Storms while astronaut Richard Gordon piloted the CM, Yankee Clipper, in a parking orbit around the Moon. Lunar soil activities included the deployment of the Apollo Lunar Surface Experiments Package (ALSEP), finding the unmanned Surveyor 3 that landed on the Moon on April 19, 1967, and collecting 75 pounds (34 kilograms) of rock samples. This is the eighth of 25 images captured by the crew in attempt to provide a 360 degree Lunar surface scene. Apollo 12 safely returned to Earth on Nov</p>	NASA Marshall Space Flight Center Collection	
C192-22P-	<p>The idea that ultimately became Skylab first surfaced in 1962 as a proposal to convert a spent Saturn upper stage (Saturn V S-II stage) into an orbital workshop. In 1968, the Marshall Space Flight Center proposed an alternative to the wet workshop concept of refurbishing a space station in orbit. Instead, a fully equipped dry workshop could be launched as a complete unit ready for occupancy. Skylab became the free world's first space station. Launched in May 1973, the Skylab space station was occupied in succession by three teams of three crewmembers. These crews spent 28, 59, and 84 days respectively, orbiting the Earth and performing nearly 300 experiments. This view of Skylab in orbit was taken by the Skylab 4 (the last Skylab mission) crew.</p>	NASA Marshall Space Flight Center Collection	
C192-50P-	<p>Haystack and HAX radars located in Tyngsboro, MA. These radars collect 600 hrs of orbital debris data each per year. They are NASA's primary source of data on centimeter sized orbital debris.</p>	JSC/NASA	

C192-51P-	LEO stands for low Earth orbit and is the region of space within 2,000 km of the Earth's surface. It is the most concentrated area for orbital debris.	JSC/NASA	
MSS12_CREATIVE_BUILDING_MATERIALS-MSS12P	Shot of newspaper, bubble wrap, aluminum foil, plastic wrap, construction paper, cardboard, and a spool of wire.	The McGraw-Hill Companies	
MSS12_EGGS-MSS12P	Eggs	Hutchings Photography/Digital Light Source	
MSS12_HABITABILITY_CHART-MSS12P	MSS12_HABITABILITY_CHART	The McGraw-Hill Companies	
MSS12_OFFICE_SUPPLIES-MSS12P	Shot of transparent tape, stapler, scissors, ruler, paper clips, push pins, rubber bands, and 1 hole punch.	The McGraw-Hill Companies	
PM_BAG_PLASTIC_SEALABLE_6X8.PSD-XPML08	Bag Plastic Sealable 6x8	Macmillan/McGraw-Hill	
C263-01P-	Chapter Opener: Exterior of Biosphere 2 at Sunrise	Roger Ressmeyer/CORBIS	000-C
C263-02P-	Lesson Opener: Botanist Jamili Nais measuring a Rafflesia flower in Kinabalu National Park in Borneo.	Frans Lanting/CORBIS	
C263-03P-	Saguaro and Organ Pipe cacti, Ajo Mountains Organ Pipe Cactus NM ARIZONA	David Muench	
C263-04P-	Gila Woodpecker (<i>Melanerpes uropygialis</i>) male and female at nest in Giant Saguaro with/nfood, Tucson, Arizona	Tom Vezo/Minden Pictures/Getty Images	
C263-06P-	Bison Graze among the arrowleaf balsomroot at the National Bison Range near Moiese Montana	Chuck Haney / DanitaDelimont.com	
C263-07P-	black-footed ferret whole body profile, Coyote Basin, Utah	Laura Romin & Larry Dalton/Alamy	
C263-08P-	Burrowing Owl (<i>Athene cunicularia</i>) trio peeking out of burrow, tallgrass prairie, South Dakota	Jim Brandenburg/Minden Pictures	
C263-09P-	Aerial view of a wheat field being harvested with combines	Comstock/PunchStock	

C263-100P-	student with a clear, plastic shoebox full of sand and a desk lamp pointed over it. In the sand should be one thermometer placed about 5cm deep in the sand. The student should be reading the temperature from another thermometer resting on the surface of the sand. Near the student should be an open notebook, as if the student were recording the temperatures.	Hutchings Photography/Digital Light Source	
C263-101P-	student with a clear, plastic shoebox containing 2L of water. The student should be holding a 1L pitcher of freshwater with 5 drops of blue food coloring in it. The student should be about to slowly pour the freshwater into the shoebox - but should not be pouring yet.	Hutchings Photography/Digital Light Source	
C263-102P-	student with a clear plastic shoebox. They should be in the process of building a model of coastal ocean with sand and rocks. There should be a thin (3 cm) layer of sand on the bottom of the tub and the student should be stacking rocks along one side of the tub to simulate a coast.	Hutchings Photography/Digital Light Source	
C263-103P-	image of a student putting the top on a "biome jar", a jar made to simulate several biomes	Hutchings Photography/Digital Light Source	
C263-104P-	image of a student putting radish seeds under the plastic wrap on their biome jar. Prior to shot, 3 seeds should be placed in the bottom of the jar. 3 more seeds should be on the unwrapped side of the paper towel that hangs out right hand side of the jar. The student should be in the process of putting 3 radish seeds underneath the plastic wrap on the paper towel on the left side of the jar.	Hutchings Photography/Digital Light Source	
C263-10P-	River in the lowland rainforest of the Danum Valley on Borneo, Sabah State, Malaysia	Frans Lanting/CORBIS	
C263-11P-	Toco toucan (<i>Ramphastos toco</i>) perching on branch near Iguacu Falls, Brazil	Gavriel Jecan/Getty Images	
C263-12P-	Ocelot (<i>Leopardus pardalis</i>). Tambopata rainforest. Amazonia basin. Peru	age fotostock/Photolibrary	
C263-13P-	Aerial of rainforest being burned to clear land for cattle ranching, Brazil, Para, Amazon region.	Jacques Jangoux/Mira.com	
C263-14P-	Big Leaf Maples, <i>Acer macrophyllum</i> , Sword Ferns, <i>Polystichum munitum</i> , and mosses in the Hoh Rainforest, Olympic National Park, WA	Doug Sherman/Geofile	

C263-15P-	Roosevelt elk, Oregon, United States of America, North America	M DeFreitas/Getty Images	
C263-17P-	Logging Washington State	Comstock Images/Alamy	
C263-18P-	First Fall Colors, Great Smoky Mountains National Park, Southern Appalachians, Newfound Gap, North Carolina	Tom Till	
C263-20P-	Red fox, <i>Vulpes vulpes</i> . Northern Minnesota, December	Bruce Lichtenberger/Peter Arnold, Inc.	
C263-21P-	Alternating strips of mature barley (foreground) with cut and windrowed alfalfa, and a strip of mid-growth grain corn. in a field in Wisconsin.	Russ Munn/CORBIS	
C263-22P-	Taiga Denali National Park Alaska USA	Marvin Dembinsky Photo Associates/Alamy	
C263-23P-	Brown Bear (<i>Ursus arctos</i>) in midsummer's night, taiga forest. Karelia near the Russian border, Finland	age fotostock/SuperStock	
C263-24P-	TUNDRA AND GLACIER, ILULISSAT, GREENLAND	Andre Gallant/Getty Images	
C263-24P--A	TUNDRA AND GLACIER, ILULISSAT, GREENLAND	Andre Gallant/Getty Images	
C263-25P-	A Lemming (<i>Lemmus lemmus</i>)	age fotostock/SuperStock	
C263-26P-	Lesson Opener: Mangrove (<i>Rhizophora macronata</i>) Lamu Island Kenya Africa	Woodfall/Photoshot	
C263-28P-	Scenic view of creek in Ricketts Glen State Park, Pennsylvania	Comstock/PunchStock	
C263-29P-	Canada. A group of Atlantic salmon swimming upriver to spawn.	Paul Nicklen/NGS/Getty Images	
C263-30P-	Stonefly (<i>Perla bipunctata</i>) larva	Stephen Dalton/Minden Pictures	
C263-31P-	River near Lake Tahoe in winter in California, USA	Medioimages/PunchStock	
C263-32P-	Great Blue Heron with catfish	Arthur Morris/Visuals Unlimited/Getty Images	
C263-33P-	Monticello Dam at the mouth of Lake Berryessa, California, USA	Dr. Marli Mill/Visuals Unlimited/Getty Images	
C263-34P-	Water Lilies (<i>Nymphaea violacea</i>) and reeds, Yellow Water Billabong, Kakadu National Park, Northern Territory, Australia	Jean-Paul Ferrero/Minden Picture	
C263-35P-	Dix Lake with reflections of clouds, Superior National Forest, Minnesota, USA	Image Ideas/PictureQuest	
C263-37P-	SMALLMOUTH BASS JUMPING OUT OF WATER.	Lynn & Donna Rogers/Peter Arnold, Inc.	
C263-38P-	Uncontrolled runoff from livestock yard may contribute to organic waste	Photograph by Tim McCabe, courtesy USDA Natural Resources Conservation Service	

C263-39P-	Purple camas and red sourdock reflected in marsh. Camas Prairie Centennial Marsh, and the Soldier Mountains near Fairfield, Idaho, USA	Steve Bly/Getty Images	
C263-40P-	Common loon and its day-old chick	Michael S. Quinton/National Geographic/Getty Images	
C263-42P-	Aerial view of now illegal wetlands development, Barnagat Bay, New Jersey, USA	James L. Amos/Peter Arnold, Inc.	
C263-43P-	Crystal River NWR, Florida	Tom & Therisa Stack/Tom Stack & Associates	
C263-45P-	harvest mouse amid blooming pickleweed plant	B. Moose Peterson	
C263-46P-	Construction of second Severn crossing Severn Estuary England UK	David Noton Photography/Alamy	
C263-47P-	Harbor Seal, Phoca vitulina, in giant kelp forest, San Clemente Island, California.	Gregory Ochocki/Photo Researchers	
C263-48P-	jellyfish. Bretagne.	Camille Lusardi/Photolibrary	
C263-49P-	Antarctic, Antarctic fur seal entangled in fishing net, Feb 2000, Arctocephalus gazella, South Georgia.	Doug Allan/Getty Images	
C263-50P-	Mussels, Gooseneck barnacles, pisaster sea stars and green anemones big sure coast California	Gavriel Jecan/Photolibrary	
C263-51P-	Black grouper drifts with sea fans and sponges. Caribbean	Comstock Images/PictureQuest	
C263-52P-	Lesson Opener: The remains of an overshot water wheel in the Luxulyan valley in Cornwall which used to drive a tram system carrying copper ore and clay	Paul Bradforth/Alamy	
C263-54P-	AMNH feature - Everton sampling using a measuring device	K. Holmes/American Museum of Natural History	
C263-55P-	AMNH feature - Kate Holmes examines a coral reef	K. Frey/American Museum of Natural History	
C263-56P-	AMNH feature - Elkhorn coral (Acropora palmata) New Providence, Bahamas. Father and son snorkeling cloned out (note: this image used as bottom portion of page background)	Stephen Frink/Getty Images	
C263-57P-	AMNH feature - Sea floor under shallow tropical water, Andros Island, Bahamas (Used top portion of image as top half of background)	Wayne Levin/Getty Images	
PM_JAR_PLASTIC_26OZ_LID.PSD-XPML08	Jar Plastic 26oz Lid	Macmillan/McGraw-Hill	
PM_PLASTICWRAP.PSD-XPML08	Plastic Wrap	Macmillan/McGraw-Hill	

C201-01P-	Chapter Opener: lithops aucampiae ssp aucampiae var aucampiae (kuruman form)	Vaughn Fleming/Garden Picture Library/Photolibrary	000-0
C201-02P-	Lesson Opener: Robotic pet dog standing by open front door	Angela Wyant/Getty Images	
C201-03P-R-MSS12	Students Measuring Plant	Peter Cade/Getty Images	
C201-04P-	E Female Green frog with eggs Texas United States Rana clamitans	BRUCE COLEMAN, INC./Alamy	
C201-04P--A	E Female Green frog with eggs Texas United States Rana clamitans	BRUCE COLEMAN INC./Alamy	
C201-05P-	N Green frog (Rana clamitans melanota) tadpole from the Conasauga River, Georgia	Mark Smith/Photo Researchers	
C201-06P-	L Green frog (Rana clamitans) tadpole with hind legs and tail, Ohio.	Gary Meszaros/Photo Researchers	
C201-07P-	J Green Frog Leaping from Perch	Joe McDonald/CORBIS	
C201-100P-	student wearing an apron and goggles seated at a lab table [desk] pouring carbonated water into a clear plastic cup containing 3 uncooked noodles [small pasta such as mini bowties or small pieces of spaghetti work well]. A box/bag of pasta (no company name or trademark image visible) should be on the table [desk] top.	Hutchings Photography/Digital Light Source	
C201-101P-	student holding two different leaves (one in each hand) and looking at one of the leaves. The leaves should be different from each other in either shape or color. A spiral-bound notebook, a pencil, and a pile of 10 leaves should be on the table [desk]. Each leaf should be a different species [see examples of different leaves on right].	Hutchings Photography/Digital Light Source	
C201-102P-	student wearing an apron and with goggles around his/her neck. The student is holding a piece of clear plastic [approximately the size of a sheet of notebook paper-could be clear plastic garbage bag or plastic wrap] about 2 cm above an open sheet of newspaper on a table [desk] top. Student is looking through a large drop of water in the center of the plastic to the newspaper. Also on the table [desk] are a spiral-bound notebook and a pencil	Hutchings Photography/Digital Light Source	

C201-103P-	Show a compound light microscope (microscope should be set to use the lowest magnification) [see example] with a slide on the stage. A natural sea sponge, a tree leaf from maple or oak, and a salt shaker partially filled (one-half to three quarters) with salt are on the table [desk] next to the microscope	Hutchings Photography/Digital Light Source	
C201-104P-	one student sitting in a chair. Student is wearing goggles and has hands palms down on top of thighs. Another student is facing the first student and is preparing to throw a foam ball at the first students face.	Hutchings Photography/Digital Light Source	
C201-105P-	student holding up a large binder clip to another student. The second student is holding a spiral-bound notebook and pencil, as if he/she is recording data. Students are standing behind a lab table [desk] which has a large sheet of paper on it. A collection of office supplies (9 objects, such as stapler, pen, pencil, highlighter, tape dispenser, paper clip, scissors, ruler, and large eraser) is at the top of the paper in the middle (end of paper farthest from students).	Hutchings Photography/Digital Light Source	
C201-106P-	close up of a student's hands holding a pencil at the end of the last sequence on a page in a spiral-bound notebook.	Hutchings Photography/Digital Light Source	
C201-107P-	A close up photo of an assortment of office supplies on a background of white paper. Include a paper clip, a binder clip, thumbtack, push pin, pencil, eraser, ink pen, rubber band, etc. There should be a minimum of six items. The items should be laid out so that each can be distinguished in the photo (not in a jumble). This will become a thumbnail sized photo, but could be used in the lab as well.	Hutchings Photography/Digital Light Source	
C201-10P-	Salmonella typhimurium bacteria. Causes food poisoning. SEM 35000X at 4x5	Gary Gaugler/The Medical File/The Medical File/Peter Arnold, Inc.	
C201-11P-	A houseplant exhibiting phototropism, the ability of a plant to grow towards a light source.	John Kaprielian/Photo Researchers	
C201-11P--A	A houseplant exhibiting phototropism, the ability of a plant to grow towards a light source.	John Kaprielian/Photo Researchers	

C201-12P-	This living ciliate Protozoa is the common Paramecium multimicronucleatum that moves by means of its numerous cilia. LM X100 at 35mm size	Michael Abbey/Visuals Unlimited	
C201-14P-	Lesson Opener: Conductor of a student band directing his musicians at concert in high school gymnasium, Fountain Valley, CA	Spencer Grant/Photolibrary	
C201-15P-	Crates of Vegetables at a Produce Stand	PhotoLink/Getty Images	
C201-16P-	Grizzly Bear (<i>Ursus arctos horribilis</i>) sitting upright, Denali National Park and Preserve, Alaska	Shin Yoshino/Minden Pictures/Getty Images	
C201-17P-	two species of conifers, Eastern White Pine (<i>Pinus strobus</i>) and Eastern Hemlock (<i>Tsuga canadensis</i>)	Mark Steinmetz	
C201-18P-	Lesson Opener: Dog tick. Colored scanning electron micrograph (SEM) of a brown dog tick, <i>Rhipicephalus sanguineus</i> seen from the front. This blood-sucking parasite of dogs can transmit to humans the <i>Rickettsia</i> bacteria which cause Rocky Mountain spotted fever (also called spotted fever or tick fever), a form of typhus. The tick's specialized mouthparts are adapted to pierce the skin of the host. It has a flattened body which swells after a meal. Ticks are relatives of spiders and have eight legs. Ticks go through three developmental stages feeding on different creatures during each stage. Magnification: x22 at 5x7cm size. Magnification: x35 at 4x5 inch size.	Eye of Science/Photo Researchers	
C201-19P-	Microscope by Anton Van Leeuwenhoek, Dutch, c1670. Van Leeuwenhoek (1632-1723) was a Dutch scientist and microscopist who was the first to observe bacteria and protozoa using his own simple microscopes	Imagestate/Photolibrary	

C201-20P-	Flea. Coloured engraving of a flea drawn by the Dutch microscopist Antoni van Leeuwenhoek (1632- 1723). The magnified insect has been drawn in remarkable detail. Van Leeuwenhoek had no formal scientific training and owned a drapers shop in Delft; he also worked in local government. As a hobby he made his own magnifying lenses and became an enthusiastic microscopist. He observed blood corpuscles, capillaries and spermatozoa, and with the help of his remarkable lenses he was able to make the first detailed descriptions of micro- organisms including bacteria and protozoa. He also accurately described the life cycles of many insects, such as the flea.	Dr Jeremy Burgess/Photo Researchers	
C201-21P-	Asian male scientist looking into microscope	JGI/Getty Images	
C201-22P-	Light micrograph of erythrocytes (red) surrounding two granulocytes (purple). Erythrocytes are red blood cells and granulocytes are a type of white blood cell (leukocyte) that have an irregular nucleus and grainy appearance. Red and white blood cells are the two main cell components of blood. Erythrocytes are carriers of oxygen and carbon dioxide to and from other cells in the body. Granulocytes are involved in the immune system's defence mechanisms, protecting the body against the invasion of foreign pathogens in the blood and lymph. Magnification: x1000 when printed 10cm wide.	Steve Gschmeissner/Photo Researchers	
C201-22P--A	Light micrograph of erythrocytes (red) surrounding two granulocytes (purple). Erythrocytes are red blood cells and granulocytes are a type of white blood cell (leukocyte) that have an irregular nucleus and grainy appearance. Red and white blood cells are the two main cell components of blood. Erythrocytes are carriers of oxygen and carbon dioxide to and from other cells in the body. Granulocytes are involved in the immune system's defence mechanisms, protecting the body against the invasion of foreign pathogens in the blood and lymph. Magnification: x1000 when printed 10cm wide.	Steve Gschmeissner/Photo Researchers	
C201-23P-	Transmission electron microscope in laboratory	Stephen Schauer/Getty Images	

C201-24P-	Electron micrograph of a polymorphonuclear neutrophil (a granulocyte or granular leukocyte), mag. 8900x (at 8 x 9 cm).	ISM/Phototake	
C201-24P--A	Electron micrograph of a polymorphonuclear neutrophil (a granulocyte or granular leukocyte), mag. 8900x (at 8 x 9 cm).	ISM/Phototake	
C201-25P-	Scanning Electron Microscope, Spain	age fotostock/SuperStock	
C201-26P-	Blood cells. Colored scanning electron micrograph (SEM) of human blood showing red and white cells. Red blood cells (erythrocytes) have a characteristic biconcave-disc shape and are numerous. These large cells contain hemoglobin, a red pigment by which oxygen is transported around the body. They are more numerous than white blood cells one of which is visible in this sample (white). White blood cells (leucocytes) are rounded cells with microvilli projections from the cell surface. Leucocytes play an important role in the immune response of the body. Magnification: x3,500 at 5x7cm size. x 7,750 at 6x4'	A. Syred/Photo Researchers	
C201-26P--A	Blood cells. Colored scanning electron micrograph (SEM) of human blood showing red and white cells. Red blood cells (erythrocytes) have a characteristic biconcave-disc shape and are numerous. These large cells contain hemoglobin, a red pigment by which oxygen is transported around the body. They are more numerous than white blood cells one of which is visible in this sample (white). White blood cells (leucocytes) are rounded cells with microvilli projections from the cell surface. Leucocytes play an important role in the immune response of the body. Magnification: x3,500 at 5x7cm size. x 7,750 at 6x4'	A. Syred/Photo Researchers	
C201-27P-	Cheetah running (<i>Acinonyx jubatus</i>)	Digital Vision/PunchStock	
C201-28P-	Pacific treefrog (<i>Hyla regilla</i>) changing from tadpole to a frog	Robert Clay/Alamy	
C201-29P-	Mallard duck with ducklings	Splinter Images/Alamy	
C201-30P-	A close-up, side view of a teen Caucasian drinking bottled water	liquidlibrary/PictureQuest	
C201-30P--A	A close-up, side view of a teen Caucasian drinking bottled water	liquidlibrary/PictureQuest	

C201-31P-	Yellow-pine Chipmunk (<i>Eutamias amoenus</i>) feeding on blueberry in a subalpine meadow, Grand Valley, Olympic National Park, Washington, USA, August,	Lee Rentz	
C201-32P-	Flame angelfish (<i>Centropyge loricula</i>)	Creatas/PunchStock	
C201-33P-	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-42P-	Click beetle (<i>Chalcolepidius limbatus</i>)	Frank Greenaway/Getty Images	
C201-43P-	Pyralis Firefly, <i>Photinus pyralis</i>	Adam Jones/Danita Delimont Agency	
C201-44P-	Japanese Beetle (<i>Popillia japonica</i>) defoliating a river birch leaf	Mark Steinmetz	
C201-45P-	june bug (<i>Cotinus nitida</i>).	Jill Van Doren/Alamy	
C201-46P-	AMNH feature - Adriana Aquino, Ichthyologist at AMNH	D. Finn/American Museum of Natural History	
C201-48P-	AMNH feature - Brazil, Mato Grosso do Sul, Bonito, Formoso River (background image)	Reinaldo Minillo/Getty Images	
C213-01P-	Chapter Opener: Western Tarsier Clinging to Tree	Frans Lanting/CORBIS	000-0
C213-02P-	Lesson Opener: Flamenco Natural Park, Colombia, A squadron of flamingos in close formation.	Bobby Haas/National Geographic/Getty Images	
C213-03P-	Masai giraffe (<i>Giraffa camelopardalis tippleskirchi</i>) reaching out to eat leaves, Masai Mara N.R, Kenya	Anup Shah/Photodisc/Getty Images	
C213-03P--A	Masai giraffe (<i>Giraffa camelopardalis tippleskirchi</i>) reaching out to eat leaves, Masai Mara N.R, Kenya	Anup Shah/Photodisc/Getty Images	
C213-04P-	Octopus <i>cyanea</i> , takes shelter in den, color change sequence, one of three (# 1 of 3) Hawaii (Central Pacific Ocean)	David Kearnes/SeaPics.com	
C213-05P-	Octopus <i>cyanea</i> , takes shelter in den, color change sequence, two of three (# 2 of 3) Hawaii (Central Pacific Ocean)	David Kearnes/SeaPics.com	
C213-06P-	Octopus <i>cyanea</i> , takes shelter in den, color change sequence, three of three (# 3 of 3) Hawaii (Central Pacific Ocean)	David Kearnes/SeaPics.com	
C213-07P-	Path through Hydrangeas field, Japan	Hiroshi Kubozuka/Sebun Photo/Getty Images	
C213-08P-	Siamese Cat	Juniors Bildarchiv/Photolibrary	
C213-09P-	Desert Locust (<i>Schistocerca gregaria</i>) male, solitary phase, native to Africa	Stephen Dalton/Minden Pictures	

C213-100P-	a student making a small model dog out of salt dough (similar to Play-Doh). Student should be working on a table and the dog should be recognizable as a dog (does not need to be a finished model or elaborate). Student may also have a small pile of unused dough on the table, but should not have any branded containers of dough visible.	Hutchings Photography/Digital Light Source	
C213-101P-	four small construction paper squares of the same size and color with one letter written on each. They will spell the word "head" when placed together. The "d" will be pushed slightly upwards on the table as if it were being removed. A student's hand will be reaching into a bag (not plastic baggie or other see-through bag) and pulling out a construction paper square with another letter written on it. It should not be possible to tell what letter is on the 2nd square. Only the student's hand should be visible.	Hutchings Photography/Digital Light Source	
C213-102P-	Show two students standing at a table. Student 1 will have in front of them a large piece (or two regularly sized pieces taped together) of red construction paper with exactly 15 small white fish shapes cut out of white construction paper. The fish should be scattered around the paper, not clumped in a pile. Student 1 should be picking one fish up. Student 2 should be using a stopwatch to time Student 1.	Hutchings Photography/Digital Light Source	
C213-103P-	Barren Ground Caribou (<i>Rangifer tarandus</i>). Caribou can be found in the Arctic National Wildlife Refuge and the Yukon Delta National Wildlife Refuge in Alaska.	U.S. Fish & Wildlife Service/Dean Biggens	

C213-104P-	two students, both wearing aprons and goggles, standing next to a table. In a large bowl is a pile of uncooked rice (should be enough to be seen in image but not so much that it overflows bowl). Student 1 will be holding a straining spoon (a plastic spoon with small holes in it for straining out water). Student 2 will be holding a pair of forceps. On the table near each student (not near the edge) will be one disposable plastic bowl (plastic, color not important). Both students should look as if they are attempting to use the tools to transfer rice into their bowl. They should not look posed; this step of the lab will be a type of race so motion should be obvious but without motion blurs.	Hutchings Photography/Digital Light Source	
C213-105P-	student wearing an apron and goggles. They should be adjusting the weights on a triple beam balance. On top of the weighing plate will be a disposable bowl (the same as that in 42P) half filled with dry macaroni. The student will have an open notebook and pencil in front of them on the table.	Hutchings Photography/Digital Light Source	
C213-10P-	Desert Locust (<i>Schistocerca gregaria</i>) gregarious phase	Stephen Dalton/Minden Pictures	
C213-11P-	Mutant fly (right) with a normal fly (left). The mutant fly has four wings instead of the normal two. These fruit flies (<i>Drosophila melanogaster</i>) are a type of fly commonly used in laboratories in breeding and genetic experiments.	Pascal Goetgheluck/Photo Researchers	
C213-13P-	Lesson Opener: Leafy Seadragon (<i>Phycodurus eques</i>) South Australia	David Hall/Minden Pictures	
C213-14P-	Hummingbird Feeding on Red Flower	CORBIS	
C213-15P-	Three King Penguins	Digital Vision/Getty Images	
C213-16P-	Large Ground Finch (<i>Geospiza magnirostris</i>), endemic species, extra large bill for cracking large seeds, largest of Darwin's 13 Finches, Santiago Island, Galapagos Islands, Ecuador	Mark Moffett/Minden Pictures/Getty Images	
C213-17P-	Warbler finch <i>Certhidia olivacea</i> Santiago Island Galapagos	Images&Stories/Alamy	
C213-18P-	Cactus Finch (<i>Geospiza scandens</i>) on <i>Opuntia</i> (<i>Opuntia</i> sp) cactus, endemic, Galapagos Islands	Hiroya Minakuchi/Minden Pictures	
C213-19P-	Asian Ladybird Beetles (<i>Harmonia axyridis</i>)	PSU Entomology/Photo Researchers	
C213-20P-	Green Tree Frog Catching a Hawk Moth	Buddy Mays/CORBIS	

C213-21P-	Spicebush Swallowtail Butterfly (<i>Papilio troilus</i>) larva or caterpillar, face-on view of head showing eyespots and other human like features, Family Papilionidae, Ohio, USA. The eyespots allow the caterpillar to resemble a snake scaring off some predators.	Gary Meszaros/Visuals Unlimited/Getty Images	
C213-22P-	With its origins in Indo-Australia (<i>Papilio polytes</i>), the Common Mormon is well-known for its mimicry of several other species of butterfly. This mimicry, used exclusively by the females, makes the butterfly resemble other, less tasty butterflies and so escape being eaten by predators.	Le-Dung Ly/Getty Images	
C213-23P-	Bull Ant (<i>Myrmecia gluosa</i>) New South Wales, Australia	David Maitland/Getty Images	
C213-24P-	Yellowjacket Wasp (<i>Vespula vulgaris</i>)	Charles Krebs/Getty Images	
C213-25P-	barnacle balanus balanoides feeding (4) wales, uk	Barrie Watts/Photolibrary	
C213-27P-	Blocks of Ice Floating Near Iceberg	CORBIS	
C213-29P-	Thermal activity. Norris Geyser Basin (hottest, most changeable and oldest active thermal area in the park).	Miguel A. Muñoz Pellicer/Alamy	
C213-31P-	Teosinte next to early form of maize	Courtesy John Doebley	
C213-32P-	Wolf on rock.	Mattias Klum/National Geographic/Getty Images	
C213-35P-	Komondor dog (<i>Canis familiaris</i>), displaying distinctive corded coat, standing, side view.	Tracy Morgan/Getty Images	
C213-36P-	Arctic fox walking in the snow	Creatas/PunchStock	
C213-37P-	Ears of White Corn	Burke Triolo Productions / Getty Images	
C213-40P-	AMNH feature - Hawksbill Turtle Eating Soft Coral	Visuals Unlimited/CORBIS	
C213-47P-	AMNH feature - conservation geneticist Eugenia Narco-Maciel of the American Museum of Natural History in NYC	Eugenia Narco-Maciel/American Museum of Natural History	
C213-49P-	AMNH feature - background for 213 design, top of page	Imagestate Media (John Foxx) / Imagestate	
MSS12_BOWL_D ISPOSABLE- MSS12P	red plastic bowl	Hutchings Photography/Digital Light Source	
MSS12_DRY_IN GREDIENTS- MSS12P	dry ingredients	Richard Hutchings (see Digital Light Source)	

MSS12_KITCHEN _UTENSILS- MSS12P	kitchen utensils	Richard Hutchings (see Digital Light Source)	
MSS12_STOPWA TCH-MSS12P	Stopwatch	Richard Hutchings (see Digital Light Source)	
PM_ASST_CONT AINERS.PSD- XPML08	asst containers	Macmillan/McGraw-Hill	
C203-01P-	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	000-0
C203-01P-	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	000-0
C203-01P--A	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C203-01P--A	Chapter Opener: Vorticella is a stalked, ciliated Protozoan, shown here with its mouth partially open with cilia protruding. SEM X340	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C203-02P-	Lesson Opener: Galapagos Land Iguana (Conolophus subcristatus) feeding on (Portulaca sp) flowers during brief rainy season, Plazas Island, Galapagos Islands, Ecuador	Tui De Roy/Minden Pictures	
C203-02P-	Lesson Opener: Galapagos Land Iguana (Conolophus subcristatus) feeding on (Portulaca sp) flowers during brief rainy season, Plazas Island, Galapagos Islands, Ecuador	Tui De Roy/Minden Pictures	
C203-03P-	Honeycomb with bee (detail)	Bon Appetit/Alamy	
C203-03P-	Honeycomb with bee (detail)	Bon Appetit/Alamy	

C203-04P-	Color enhanced illustration of cork wood cells by Robert Hooke from observations of cork wood under a microscope. Robert Hooke (1635-1703) was born in England and studied at Oxford University, assisting in chemistry under Robert Boyle. The illustration appeared in his book "Micrographia", which was published in 1667 and is believed to be the first major book on microscopy. The term "cells" was coined by Hooke in the publication, describing the pores observed in the cork. "Micrographia" also contributed to areas of optics, combustion, and geology.	Omikron/Photo Researchers	
C203-04P-	Color enhanced illustration of cork wood cells by Robert Hooke from observations of cork wood under a microscope. Robert Hooke (1635-1703) was born in England and studied at Oxford University, assisting in chemistry under Robert Boyle. The illustration appeared in his book "Micrographia", which was published in 1667 and is believed to be the first major book on microscopy. The term "cells" was coined by Hooke in the publication, describing the pores observed in the cork. "Micrographia" also contributed to areas of optics, combustion, and geology.	Omikron/Photo Researchers	
C203-05P-	Virginia Spiderwort (<i>Tradescantia virginiana</i>), Shenandoah National Park, Virginia and North Carolina	Tim Fitzharris/Minden Pictures/Getty Images	
C203-05P-	Virginia Spiderwort (<i>Tradescantia virginiana</i>), Shenandoah National Park, Virginia and North Carolina	Tim Fitzharris/Minden Pictures/Getty Images	
C203-06P-	A stained micrograph of a spider-wort leaf (<i>tradescantia</i>) showing the stomates, guard cells, nuclei, and cell walls. The genus is named after John Tradescant who was the gardener to King Charles I in 1629. Tradescantia was once thought to be a cure for spider bites hence the common name spider-wort. In the USA it generally blooms from June through August. Magnification: LM 350X.	James M. Bell/Photo Researchers	

C203-06P-	A stained micrograph of a spider-wort leaf (tradescantia) showing the stomates, guard cells, nuclei, and cell walls. The genus is named after John Tradescant who was the gardener to King Charles I in 1629. Tradescantia was once thought to be a cure for spider bites hence the common name spider-wort. In the USA it generally blooms from June through August. Magnification: LM 350X.	James M. Bell/Photo Researchers	
C203-07P-	TEM image of phagocytosis; Amoeba engulfing a green algal cell for food. Magnification = 9,750x at max size (9.3" by 5.0")	Biophoto Associates/Photo Researchers	
C203-07P-	TEM image of phagocytosis; Amoeba engulfing a green algal cell for food. Magnification = 9,750x at max size (9.3" by 5.0")	Biophoto Associates/Photo Researchers	
C203-08P-	Mitosis Series: Prophase Stage. SEM x3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-08P-	Mitosis Series: Prophase Stage. SEM x3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-09P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-09P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-100P-	student sitting behind a lab table [desk] and placing a pipe cleaner in a circle on a piece of construction paper. other craft items-yarn, pom poms (various sizes and colors), beads (various sizes and colors), colored markers, and aluminum foil-should also be on the table [desk].	Hutchings Photography/Digital Light Source	
C203-100P-	student sitting behind a lab table [desk] and placing a pipe cleaner in a circle on a piece of construction paper. other craft items-yarn, pom poms (various sizes and colors), beads (various sizes and colors), colored markers, and aluminum foil-should also be on the table [desk].	Hutchings Photography/Digital Light Source	

C203-101P-	close-up of a student's hands. The student is in the process of completing a cut through a cube of egg white (2 cm per side and soaked in blue food coloring so the outside of the cube is blue and the inside is white) with a plastic knife. The egg white is on a paper towel. Also on the paper towel are a metric ruler and a 250-mL beaker containing 100 mL of dark blue water. Follow these steps to set up the shot: 1. hard cook a large egg; cool; remove shell 2. prepare the colored water by adding 10 drops of blue food coloring to 100mL of water. 3. Prepare the cooked egg white by cutting to size (2cm x 2cm x 2cm) and placing in colored water for at least 30 minutes. 4. plastic knife should NOT be clear, white or blue (these colors are difficult to see against background and/or match the color of the egg).	Hutchings Photography/Digital Light Source	
C203-101P-	close-up of a student's hands. The student is in the process of completing a cut through a cube of egg white (2 cm per side and soaked in blue food coloring so the outside of the cube is blue and the inside is white) with a plastic knife. The egg white is on a paper towel. Also on the paper towel are a metric ruler and a 250-mL beaker containing 100 mL of dark blue water. Follow these steps to set up the shot: 1. hard cook a large egg; cool; remove shell 2. prepare the colored water by adding 10 drops of blue food coloring to 100mL of water. 3. Prepare the cooked egg white by cutting to size (2cm x 2cm x 2cm) and placing in colored water for at least 30 minutes. 4. plastic knife should NOT be clear, white or blue (these colors are difficult to see against background and/or match the color of the egg).	Hutchings Photography/Digital Light Source	
C203-10P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-10P-	Mitosis Series: Late Telophase Stage. SEM X3600	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited/Getty Images	
C203-12P-	A glass of water and salt	FoodCollection/SuperStock	
C203-12P-	A glass of water and salt	FoodCollection/SuperStock	

C203-13P-	Mammalian cell. Colour transmission electron micrograph of a single mammalian tissue culture cell. Taking up most of the cell is the nucleus (red, round), where genes are stored in the form of chromosomes. The orange area in the nucleus is the nucleolus. This is the most active part of the nucleus, and contains unraveled chromosomes involved in making protein-manufacturing bodies called ribosomes. Outside the nucleus is the cell cytoplasm (blue). It contains a mixture of cell organelles including mitochondria that supply the cell with energy. Magnification x300 at 6x6cm size.	Dr. Gopal Murti/Photo Researchers	
C203-13P-	Mammalian cell. Colour transmission electron micrograph of a single mammalian tissue culture cell. Taking up most of the cell is the nucleus (red, round), where genes are stored in the form of chromosomes. The orange area in the nucleus is the nucleolus. This is the most active part of the nucleus, and contains unraveled chromosomes involved in making protein-manufacturing bodies called ribosomes. Outside the nucleus is the cell cytoplasm (blue). It contains a mixture of cell organelles including mitochondria that supply the cell with energy. Magnification x300 at 6x6cm size.	Dr. Gopal Murti/Photo Researchers	
C203-14P-	Lesson Opener: Velcro. (SEM 40x)	Eye of Science/Photo Researchers	
C203-14P-	Lesson Opener: Velcro. (SEM 40x)	Eye of Science/Photo Researchers	
C203-15P-	Bronchial cilia. Colored scanning electron micrograph (SEM) of a normal human bronchial epithelium, the mucus membrane lining the major airways of the lung. Clumps of hair-like cilia (green/pink) protrude from the tops of specialized epithelial cells (brown). Rhythmic movements of the cilia serve to move bacteria and other particles away from the gas-exchanging parts of the lung and towards the throat, where they can be expelled. Magnification unknown.	SPL/Photo Researchers	

C203-15P-	Bronchial cilia. Colored scanning electron micrograph (SEM) of a normal human bronchial epithelium, the mucus membrane lining the major airways of the lung. Clumps of hair-like cilia (green/pink) protrude from the tops of specialized epithelial cells (brown). Rhythmic movements of the cilia serve to move bacteria and other particles away from the gas-exchanging parts of the lung and towards the throat, where they can be expelled. Magnification unknown.	SPL/Photo Researchers	
C203-16P-	Eukaryotic cell showing numerous organelles, including a large and prominent nucleus and abundant endoplasmic reticulum. This plasma cell is a mature B-lymphocyte or white blood cell. TEM X15,500	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-16P-	Eukaryotic cell showing numerous organelles, including a large and prominent nucleus and abundant endoplasmic reticulum. This plasma cell is a mature B-lymphocyte or white blood cell. TEM X15,500	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-18P-	Electron micrograph of a rough endoplasmic reticulum from a neuron, showing numerous ribosomes on the cisternae surface, mitochondrion (purple), and nucleus (blue), mag. 19,030x. The endoplasmic reticulum is an ultramicroscopic organelle of nearly all higher plant and animal cells.	Dennis Kunkel / Phototake	
C203-18P-	Electron micrograph of a rough endoplasmic reticulum from a neuron, showing numerous ribosomes on the cisternae surface, mitochondrion (purple), and nucleus (blue), mag. 19,030x. The endoplasmic reticulum is an ultramicroscopic organelle of nearly all higher plant and animal cells.	Dennis Kunkel / Phototake	
C203-19P-	(animal cell) Mitochondrion. TEM X14,000	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-19P-	(animal cell) Mitochondrion. TEM X14,000	Dr. Donald Fawcett/Visuals Unlimited/Getty Images	
C203-20P-	The chloroplast is the structure or plastid within which chlorophyll is located and photosynthesis occurs.(no mag listed)	Dr. R. Howard Berg/Visuals Unlimited/Getty Images	
C203-20P-	The chloroplast is the structure or plastid within which chlorophyll is located and photosynthesis occurs.(no mag listed)	Dr. R. Howard Berg/Visuals Unlimited/Getty Images	

C203-21P-	Electron micrograph of a Golgi apparatus of a plant, showing stacks of cisternae and vesicles, mag. 11,010x.	Dennis Kunkel / Phototake	
C203-21P-	Electron micrograph of a Golgi apparatus of a plant, showing stacks of cisternae and vesicles, mag. 11,010x.	Dennis Kunkel / Phototake	
C203-22P-	Lesson Opener: beekeeper (see caption in notes).	LIU JIN/AFP/Getty Images	
C203-22P-	Lesson Opener: beekeeper (see caption in notes).	LIU JIN/AFP/Getty Images	
C203-25P-	Lesson Opener: canadian waterweed creating bubbles underwater	Colin Milkins/Photolibrary	
C203-25P-	Lesson Opener: canadian waterweed creating bubbles underwater	Colin Milkins/Photolibrary	
C203-26P-	Striated muscle. Colored transmission electron micrograph (TEM) of a longitudinal section through striated skeletal muscle. The striated banding- pattern of the muscle fibrils is seen. The fibrils run in parallel (from left to right) and between them runs sarcoplasmic reticulum (SR) that transmits nerve impulses to the fibrils. Here, the SR contains many mitochondria. Within each fibril are contractile units called sarcomeres separated by lines. A sarcomere has protein filaments of myosin and actin that slide over each other, thereby causing the whole muscle to contract. Skeletal muscle is responsible for voluntary muscle movement in the body. (no mag given)	Biology Media/Photo Researchers	
C203-26P-	Striated muscle. Colored transmission electron micrograph (TEM) of a longitudinal section through striated skeletal muscle. The striated banding- pattern of the muscle fibrils is seen. The fibrils run in parallel (from left to right) and between them runs sarcoplasmic reticulum (SR) that transmits nerve impulses to the fibrils. Here, the SR contains many mitochondria. Within each fibril are contractile units called sarcomeres separated by lines. A sarcomere has protein filaments of myosin and actin that slide over each other, thereby causing the whole muscle to contract. Skeletal muscle is responsible for voluntary muscle movement in the body. (no mag given)	Biology Media/Photo Researchers	

C203-27P-	Yeast cells. Coloured scanning electron micrograph (SEM) of budding yeast cells (yellow, <i>Saccharomyces cerevisiae</i>). Known as baker's or brewer's yeast, this fungus consists of single vegetative cells. The larger "mother" cells are budding off smaller daughter cells in cell division. <i>Saccharomyces cerevisiae</i> is able to ferment sugar, producing alcohol and carbon dioxide in the process. It has long been used in the brewing of beer, production of wine, and in baking leavened bread (causing the dough to rise). Magnification: x4, 750 at 5x7cm size. x12, 250 at 6.75x4.75"	Andrew Syred/Photo Researchers	
C203-27P-	Yeast cells. Coloured scanning electron micrograph (SEM) of budding yeast cells (yellow, <i>Saccharomyces cerevisiae</i>). Known as baker's or brewer's yeast, this fungus consists of single vegetative cells. The larger "mother" cells are budding off smaller daughter cells in cell division. <i>Saccharomyces cerevisiae</i> is able to ferment sugar, producing alcohol and carbon dioxide in the process. It has long been used in the brewing of beer, production of wine, and in baking leavened bread (causing the dough to rise). Magnification: x4, 750 at 5x7cm size. x12, 250 at 6.75x4.75"	Andrew Syred/Photo Researchers	
C203-28P-	Emerald Toucanet (<i>Aulacorhynchus prasinus</i>) feeding on Passionfruit (<i>Passiflora</i>) Costa Rica	Michael & Patricia Fogden/Minden Pictures	
C203-28P-	Emerald Toucanet (<i>Aulacorhynchus prasinus</i>) feeding on Passionfruit (<i>Passiflora</i>) Costa Rica	Michael & Patricia Fogden/Minden Pictures	
C203-31P-	Show a student wearing an apron and goggles seated at a lab table (desk) sketching the inside of a bean seed	Hutchings Photography/Digital Light Source	
C203-31P-	Show a student wearing an apron and goggles seated at a lab table (desk) sketching the inside of a bean seed	Hutchings Photography/Digital Light Source	
C203-32P-	student wearing an apron and goggles feeling the contents of a raw egg in a clear glass bowl.	Hutchings Photography/Digital Light Source	
C203-32P-	student wearing an apron and goggles feeling the contents of a raw egg in a clear glass bowl.	Hutchings Photography/Digital Light Source	

C203-34P-	student standing behind the lab counter wearing an apron and goggles and unwrapping a straw. On the lab counter [desk] in front of him is a small, clear plastic cup containing the prepared bromthymol blue solution.	Hutchings Photography/Digital Light Source	
C203-34P-	student standing behind the lab counter wearing an apron and goggles and unwrapping a straw. On the lab counter [desk] in front of him is a small, clear plastic cup containing the prepared bromthymol blue solution.	Hutchings Photography/Digital Light Source	
C203-35P-	close up of a student's hand holding the results of having cut the bottom end of the Elodea stem at an angle, and lightly crush that end. The hands holding the Elodea should be just above the paper towel. The scissors should be on the paper towel.	Hutchings Photography/Digital Light Source	
C203-35P-	close up of a student's hand holding the results of having cut the bottom end of the Elodea stem at an angle, and lightly crush that end. The hands holding the Elodea should be just above the paper towel. The scissors should be on the paper towel.	Hutchings Photography/Digital Light Source	
C203-36P-	student wearing an apron and goggles holding a spiral-bound notebook and pencil, as if he/she is recording data. The student is observing the setup described in step 2 and props section below. If possible, show visible bubbles in test tube.	Hutchings Photography/Digital Light Source	
C203-36P-	student wearing an apron and goggles holding a spiral-bound notebook and pencil, as if he/she is recording data. The student is observing the setup described in step 2 and props section below. If possible, show visible bubbles in test tube.	Hutchings Photography/Digital Light Source	
C203-37P-	student seated at a lab table [desk] with goggles around his/her neck. In front of the student is a compound light microscope (microscope should be using the lowest magnification) [see example right] with a slide on the stage. The student is drawing on a piece of paper. Clearly visible on the paper is "Plant Cell" and the student appears to be making his/her drawing below these words.	Hutchings Photography/Digital Light Source	

C203-37P-	student seated at a lab table [desk] with goggles around his/her neck. In front of the student is a compound light microscope (microscope should be using the lowest magnification) [see example right] with a slide on the stage. The student is drawing on a piece of paper. Clearly visible on the paper is "Plant Cell" and the student appears to be making his/her drawing below these words.	Hutchings Photography/Digital Light Source	
C203-47P-	Show a student wearing an apron and goggles standing behind a lab table [desk] and holding a spiral-bound notebook and pencil as if he/she is recording data. The student is observing three inflated balloons (labeled 1, 2 and 3-labels should be visible) sitting in clear, glass beakers on lab table [desk]. Liquids (between 50 mL and 75 mL) should be visible inside the balloons (chocolate syrup in balloon 1, orange juice in balloon 2, and a clear liquid in balloon 3).	Hutchings Photography/Digital Light Source	
C203-47P-	Show a student wearing an apron and goggles standing behind a lab table [desk] and holding a spiral-bound notebook and pencil as if he/she is recording data. The student is observing three inflated balloons (labeled 1, 2 and 3-labels should be visible) sitting in clear, glass beakers on lab table [desk]. Liquids (between 50 mL and 75 mL) should be visible inside the balloons (chocolate syrup in balloon 1, orange juice in balloon 2, and a clear liquid in balloon 3).	Hutchings Photography/Digital Light Source	
C203-48P-	Lesson 1 Minilab: PLANT MITOSIS; ALL PHASES, ONION (Allium) ROOT TIP, 200X at 35mm, Interphase, Prophase, Metaphase, Anaphase, Telophase.	Ed Reschke/Peter Arnold, Inc.	
C203-48P-	Lesson 1 Minilab: PLANT MITOSIS; ALL PHASES, ONION (Allium) ROOT TIP, 200X at 35mm, Interphase, Prophase, Metaphase, Anaphase, Telophase.	Ed Reschke/Peter Arnold, Inc.	

C203-49P-	How it Works feature - Coloured atomic force micrograph (AFM) of the surface of a nucleus showing the nuclear pore complexes (NPCs). NPCs are complexes of proteins that are embedded in the nuclear envelope. All material moving between the nucleus and the cell cytoplasm passes through these channels. They allow passive transport (diffusion) of ions and small molecules and active transport (energy dependent) of proteins and RNAs (ribonucleic acids). Magnification: x334,500 when printed at 10 centimetres tall.	VICTOR SHAHIN, PROF. DR. H.OBERLEITHNER, UNIVERSITY HOSPITAL OF MUENSTER/Photo Researchers	
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C203-50P-	How it Works feature - In this artist's concept illustration, NASA's Phoenix Mars Lander begins to shut down operations as winter sets in. The far-northern latitudes on Mars experience no sunlight during winter. This will mark the end of the mission because the solar panels can no longer charge the batteries on the lander. Frost covering the region as the atmosphere cools will bury the lander in ice.	NASA-JPL	
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MSS12_BEAKER _100ML-MSS12P	100ml Beaker	Richard Hutchings (see Digital Light Source)	

MSS12_BEAKER_100ML-MSS12P	100ml Beaker	Richard Hutchings (see Digital Light Source)	
MSS12_CLOCK-	photograph of a clock. The photo will be a close up of a clock with a second hand. The face should be discernible and the second hand should stand out.	Hutchings Photography/Digital Light Source	
MSS12_CLOCK-	photograph of a clock. The photo will be a close up of a clock with a second hand. The face should be discernible and the second hand should stand out.	Hutchings Photography/Digital Light Source	
MSS12_ELODEA-	photograph of a sprig of Elodea	Hutchings Photography/Digital Light Source	
MSS12_ELODEA-	photograph of a sprig of Elodea	Hutchings Photography/Digital Light Source	
MSS12_GLASS_SLIDE-	A thumbnail photograph of a glass slide and a coverslip. The photo will be a close up and the background should be contrasting to show both the slide and the coverslip. The goby shows a pair of slides and a pair of coverslips.	Hutchings Photography/Digital Light Source	
MSS12_GLASS_SLIDE-	A thumbnail photograph of a glass slide and a coverslip. The photo will be a close up and the background should be contrasting to show both the slide and the coverslip. The goby shows a pair of slides and a pair of coverslips.	Hutchings Photography/Digital Light Source	
MSS12_MICROSCOPE_COMPOUND-	A thumbnail photograph of a microscope. The photo will be a close up of a student microscope.	Hutchings Photography/Digital Light Source	
MSS12_MICROSCOPE_COMPOUND-	A thumbnail photograph of a microscope. The photo will be a close up of a student microscope.	Hutchings Photography/Digital Light Source	
MSS12_SLIDE_PREP-	close up of a glass slide with a white square on one end	Hutchings Photography/Digital Light Source	
MSS12_SLIDE_PREP-	close up of a glass slide with a white square on one end	Hutchings Photography/Digital Light Source	
MSS12_TEST_TUBE-	close up of a test tube	Hutchings Photography/Digital Light Source	
MSS12_TEST_TUBE-	close up of a test tube	Hutchings Photography/Digital Light Source	
MSS12_THERMOMETER-	close up of an alcohol lab thermometer	Hutchings Photography/Digital Light Source	
MSS12_THERMOMETER-	close up of an alcohol lab thermometer	Hutchings Photography/Digital Light Source	

PM_DROPPER.PSD-XPML08	Dropper	Macmillan/McGraw-Hill	
PM_DROPPER.PSD-XPML08	Dropper	Macmillan/McGraw-Hill	
PM_FOOD_BIRD SEED.PSD-XPML08	Food BirdSeed	Macmillan/McGraw-Hill	
PM_FOOD_BIRD SEED.PSD-XPML08	Food BirdSeed	Macmillan/McGraw-Hill	
PM_FOOD_COLO RING_BLUE.PSD-XPML08	Food Coloring Blue	Macmillan/McGraw-Hill	
PM_FOOD_COLO RING_BLUE.PSD-XPML08	Food Coloring Blue	Macmillan/McGraw-Hill	
PM_LAMP_DESK.PSD-XPML08	Lamp Desk	Macmillan/McGraw-Hill	
PM_LAMP_DESK.PSD-XPML08	Lamp Desk	Macmillan/McGraw-Hill	
C02-01P-874184	1 of 4 -Zebrafish embryo, first cleavage, forming two cells. **on page credit required** SEM X160	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited	
C02-24P-874184	2 of 4 -Early zebrafish development- 4 cell stage SEM 155X	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited	
C02-25P-874184	3 of 4 - Early zebrafish development - 32 cell stage SEM 150X	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited	
C02-26P-874184	4 of 4 -Early zebrafish development - 256 cell stage SEM 130X	Dr. Richard Kessel & Dr. Gene Shih/Visuals Unlimited	
C204-01P-	Chapter Opener: The interior of a hen's egg shows a twenty one day old chick.	Robert Pickett/CORBIS	000-c
C204-03P-	Binary fission, or mitosis of a Paramecium caudatum.	Michael Abbey/Photo Researchers	
C204-04P-	Same tree in all 4 seasons at Toronto Ontario Canada	Bill Brooks/Alamy	
C204-05P-	Whitefish Mitosis, Interphase. 250x at 35mm. Shows: nucleus, nuclear membrane, chromatin, no chromosomes.	Ed Reschke/Peter Arnold, Inc.	

C204-06P-	Color enhanced transmission electron micrograph (TEM) of duckweed (<i>Spirodela oligorrhiza</i>) root cells, showing distinguished cell walls, centralized nuclei, and numerous chloroplasts. Magnification: 10,900x (8x10in print). Enhancement of 9f9334.	Biophoto Associates/Photo Researchers	
C204-07P-	Dividing mitochondrion in a rat's liver. Arrows denote the septum, which plays a role in the partitioning of the organelle. The septum of dividing mitochondria consists of two membranes separated by a narrow interspace with dimensions similar to those of an intracrystal space. TEM - No mag available (from the book, <i>The Cell</i>).	Don W. Fawcett/Photo Researchers	
C204-08P-	ANIMAL MITOSIS, PROPHASE (LATE), 250X at 35mm, WHITEFISH EMBRYO. Shows the chromosomes.	Ed Reschke/Peter Arnold, Inc.	
C204-09P-	ANIMAL MITOSIS. METAPHASE, 250X at 35mm, WHITEFISH EMBRYO. Shows: chromosomes, spindle fibers (microtubules), and asters. Chromosomes are lined up on the metaphase (equatorial) plate.	Ed Reschke/Peter Arnold, Inc.	
C204-100P-	a student seated at a lab table (desk), holding a pencil, and beginning to draw the missing half of an animal cell. On the table (desk) top is a sheet of paper with half of a cell drawing glued to it (drawing attached) and a bottle of glue.	Hutchings Photography/Digital Light Source	
C204-101P-	student seated at a lab table (desk), in the process of sorting the County, State, Country and Continent labels. The labels should NOT be in the correct order (county, state, country, continent), but should be randomly placed on table. The squares of construction paper (glued together as shown on the attachment with the City label glued to the center square), scissors, and glue are also on the table (desk). Follow these steps to set up the shot: 1) Cut five pieces of construction paper, on in each of the following sizes: 4 cm ² , 8 cm ² , 12 cm ² , 16 cm ² , and 20 cm ² . Use a different color for each square. Glue the squares together (as shown on Attachment 1). 2) Cut out the City, County, State, Country and Continent labels (provided on Attachment 2). 3) Glue the City label to the smallest square of construction paper (as shown on Attachment 1).	Hutchings Photography/Digital Light Source	

C204-102P-	student sitting behind a lab table (desk) and placing a "chromosome" (two 6-cm pieces of yarn tied together in the center with a twist tie) in a circle of yarn on a piece of paper. The word "Prophase" is written in marker and is clearly visible below the circle of yarn. Five skeins of yarn (in five different colors), twist ties (5-6), a pair of scissors, a marker, and another piece of paper with a circle of yarn and the word "Metaphase" should also be on the table (desk).	Hutchings Photography/Digital Light Source	
C204-103P-	student sitting behind a lab table (desk) and in the process of placing pasta on a piece of cardboard. See set-up below. Additional pieces of pasta, an orange permanent marker, and glue should also be on the table (desk). Follow these steps to set up the shot: 1) Cut a piece of cardboard into the shape indicated on the attached template. 2) Draw orange dots on the center of enough pieces of pasta to cover the shape. Fill part of the shape with pasta pieces (orange dots showing) glued to the cardboard. Place remaining pieces of pasta on table.	Hutchings Photography/Digital Light Source	
C204-104P-	student in the process of cutting a hard boiled egg length-wise with a plastic knife. The egg should be on a paper towel. The broken eggshell is also on the paper towel. The student is photographed at the moment after the cut is complete and one half of the egg has fallen to the paper towel. The other half of the egg is still held by the student.	Hutchings Photography/Digital Light Source	
C204-105P-	close up of a student's hand using forceps and scissors to peel back the skin from a boiled chicken leg. The chicken leg should be on a paper towel. The hands should be photographed at the moment of lifting a large flap of skin (cut from three sides). One hand is holding the skin with forceps. The other hand is beginning to finish the cut down one side with scissors.	Hutchings Photography/Digital Light Source	
C204-10P-	ANIMAL MITOSIS. ANAPHASE, 250X at 35mm, WHITEFISH EMBRYO. Daughter chromosomes are moving to the poles of the spindle.	Ed Reschke/Peter Arnold, Inc.	

C204-11P-	ANIMAL MITOSIS. TELOPHASE & CYTOKINESIS, 250X at 35mm, WHITEFISH EMBRYO. Shows: chromosomes, spindle fibers, cleavage furrow, and daughter cells.	Ed Reschke/Peter Arnold, Inc.	
C204-12P-	Cell division. Coloured scanning electron micrograph (SEM) of a neuroglia cell splitting into two new cells (cytokinesis) after mitosis. Mitosis is a form of cell division in which a cell's nucleus splits to form two identical copies of itself. These new nuclei move to opposite parts of the cell, and the cytoplasm between them constricts to leave only a thin bridge (centre), which eventually breaks. Neuroglia cells are supportive cells which make up around half the weight of the central nervous system. Magnification: x1500 at 6x7cm size.	P.M. Motta & D. Palermo/Photo Researchers	
C204-13P-	CYTOKINESIS. TELOPHASE. CELL DIVISION IN ONION. LM at 400x at 4x5 inches	Manfred Kage/Peter Arnold, Inc.	
C204-16P-	Komodo Dragon (<i>Varanus komodoensis</i>), basking at sunrise to gain heat, vulnerable species, Rinca Island, Komodo National Park, Indonesia	Cyril Ruoso/ JH Editorial/Minden Pictures	
C204-17P-	Komodo dragon skin, colored scanning electron micrograph (SEM x12 at 10 cm wide). The Komodo dragon (<i>Varanus komodoensis</i>) has armored scaly skin. It is the largest lizard in the world, reaching over three meters in length. It is endemic to the Indonesian island of Komodo and its neighbours.	Steve Gschmeissner/Photo Researchers	
C204-18P-	Amoeba proteus Protozoa capturing a small Desmid (<i>Staurastrum brachiatum</i>) by engulfing it with extended pseudopods or false feet. DIC LM X16 Also note the protist's anatomical features. Just above the algal prey, from left to right, is a spherical contractile vacuole which pumps excess water out of the cell, the nucleus, and several food vacuoles.	Wim van Egmond/Visuals Unlimited/Getty Images	
C204-19P-	Grand Prismatic Spring	Jeff Vanuga/CORBIS	

C204-20P-	Colored transmission electron micrograph (TEM) of the sulphur-eating bacteria, Thiocystis sp. Bacteria that use chemicals such as sulphur to convert to energy are known as chemolithotrophs. Thiocystis lives in an anaerobic (oxygen free) environment. It is spherical or oval-shaped, with a polar flagellum that is used for movement. Some bacteria seen here, with two cells, are in the process of cell division. Thiocystis stores sulphur in granules within its cell. It belongs to the group of "purple sulphur bacteria" that are found in anaerobic zones of lakes and sulphur springs, developing a purple color. Magnification: x6,000 at 6x4.5cm size.	Alfred Pasioka/Photo Researchers	
C204-21P-	Light micrograph of a section of human smooth muscle C204-21P (smooth muscle) = LM at 100x (at 35mm). It is composed of spindle-shaped cells grouped in irregular bundles. Each cell contains one nucleus per cell, seen here as a dark stained spot. Smooth muscle controls automatic reactions such as the contraction of blood vessels & of the gut.	Biophoto Associates/Photo Researchers	
C204-22P-	Buttercup stem. Colored scanning electron micrograph (SEM) of a transverse (cross) section through part of a stem of a Buttercup, Ranunculus repens, showing a vascular bundle. This is a typical dicotyledon stem. At center is an oval vascular bundle embedded in parenchyma cells (yellow) of the cortex of the stem. Some parenchyma cells contain chloroplasts (green). The vascular bundle contains large xylem vessels (center right) which serve to conduct water; the nutrient conducting phloem is orange. At the outer edge of the vascular bundle is sclerenchyma tissue which supports the vascular bundle. Magnification: x113 at 5x7cm size.	Andrew Syred/Photo Researchers	
C204-23P-	LEAF CROSS SECTION, Privet (Ligustrum), LM 50X. Shows: palisade mesophyll, spongy mesophyll, epidermis, stomata and guard cells.	Ed Reschke/Peter Arnold, Inc.	
C204-24P-	Privet	Michael Drane/Alamy	
C204-29P-	Lesson Opener: Butterfly on Willow branch in Gerardmer forest Vosges summer (Apatura iris). Note - blowout of wingspot/scales is C204-30P.	Biosphoto/Bringard Denis/Peter Arnold, Inc.	

C204-30P-	Lesson Opener inset - detail of a wing of butterfly (Apatura iris)	Biosphoto/Lopez Georges/Peter Arnold, Inc.	
C204-31P-	Science and Society feature - In this undated handout photo provided by the Marshall University Forensic Science Center, a DNA analyst processes evidence in Huntington, W.Va. The university's Forensic Science Center is providing free DNA testing services to help police solve property crimes. So far, it has provided DNA analysis on more than 950 property crimes cases.	Alex Wilson/Marshall University/AP Images	
C204-32P-	Science and Society feature - A young African American mother talks to her baby	Bananastock/Alamy	
MSS12_CHICKEN_LEG_BOILED-MSS12P	chicken leg	Hutchings Photography/Digital Light Source	
MSS12_EGGS-MSS12P	Eggs	Richard Hutchings (see Digital Light Source)	
MSS12_FORCEPS-	Photo of a pair of forceps	Hutchings Photography/Digital Light Source	
MSS12_PAPER_TOWEL_ROLL-	A thumbnail photo to show a paper towel roll. The roll should be standing on one end and should be plain white. Silo	Hutchings Photography/Digital Light Source	
PM_KNIVES_PLASTIC-XPML08	Plastic knives	Richard Hutchings (see Digital Light Source)	
C240-01P-	Chapter Opener: cross sectioned male from the Visible Human Body Project including head	The Visible Human Project, U.S. National Library of Medicine	000-0
C240-01P--A	Chapter Opener: cross sectioned male from the Visible Human Body Project including head	The Visible Human Project, U.S. National Library of Medicine	
C240-02P-	Lesson 1 Opener: Resin cast of a human lung section showing the bronchi and bronchioles (yellowish), airways (white), and veins (blue). The lungs have a large network of airways, which gives them a huge surface area for oxygen to diffuse into the blood and carbon dioxide to diffuse out.	Ralph Hutchings/Visuals Unlimited/Getty Images	
C240-03P-	A young hispanic woman snowshoes alone on a sunny day in Colorado	John Terence Turner/Alamy	
C240-04P-	A close-up of the nutrition facts on Haagen-Dazs chocolate chip cookie dough flavored ice cream	Jill Braaten/The McGraw-Hill Companies	

C240-05P-	Color enhanced light microscopy of a human white blood cell engulfing a bacterium (<i>Bacillus megaterium</i>). From the beginning, when the bacterium touches the blood cell, until the bacterium has been taken completely in, the action takes 70 seconds.	Omikron/Photo Researchers	
C240-06P-	Lesson 2 Opener: Japan's Nippon Dental University Hospital staff Yuko Uchida demonstrates a humanoid robot of dental therapy simulator 'Simroid' for dentists and students of dental colleges, which has sensors in its mouth and can shout 'Ouch' when the dentist gives the wrong treatment, at the International Robot Exhibition in Tokyo 29 November 2007. The robot was developed by Japanese robot venture Kokoro and Nippon Dental University and now is in trial use at clinical training of the university	YOSHIKAZU TSUNO/AFP/Getty Images	
C240-07P-	Lesson Review question Lesson 1 (replacing 2nd use of 04P): Nutrition Facts from a Clif brand Electrolyte drink mix	Mark Steinmetz	
C240-09P-	Lesson 3 Opener - Scanning electron micrograph of human spermatozoa fertilizing an egg in vitro. (X3500)	David M. Phillips/Photo Researchers	
C240-100P-	students sitting around a small desk or table. Each student has a graduated cylinder in front of them. In the middle of the desk or table is a larger glass jar or bowl that is filled with water. One student is using a spoon to move water from the glass jar or bowl into his/her graduated cylinder. The other students observe this activity. One of the other students has a stopwatch and is using it to keep time as he/she observes the student moving the water.	Hutchings Photography/Digital Light Source	
C240-101P-	Teenage Girl Drinking from Water Fountain	Thinkstock/Getty Images	

C240-102P-	two students sitting on the floor in front of connected pieces of plastic toy race car tracks. The tracks are connected in straight segments. There should be two segments of track running side-by-side parallel to each other, and close together, like a two-lane highway. At the end of the segments are index cards. Writing on the index cards does not have to be visible, but if it is, it will read "lung cell" and "body cell". One student is pushing a toy police car along the track while the other student holds a red toy pickup truck.	Hutchings Photography/Digital Light Source	
C240-103P-	student with a plastic doll or action figure that is partially-assembled. The doll or action figure should be of a full-grown adult and consist of a separate head, separated arms, and a lower body portion. The doll or figure is missing the chest. The student should have these doll parts in front of them along with some of the materials used in the lab: paper clips, rubber bands, drinking straws, tape, string.	Hutchings Photography/Digital Light Source	
C240-104P-	student standing on one leg, with the other leg lifted off the ground. The arm above the lifted leg is held straight out above the lifted knee (the lifted leg and arm are both on the same side of the body)	Hutchings Photography/Digital Light Source	
C240-105P-	student with a ruler measuring the diameters of various round objects. In front of the student is a basketball, baseball, marble, and a beach ball. The student should be holding the ruler up to one of the objects as if measuring the diameter.	Hutchings Photography/Digital Light Source	
C240-106P-	two students making a mobile (close-up view focusing more on the mobile than on the students--do NOT show faces of students). One student should be holding the middle of a string that is attached to a dowel. The second student is tying one end of another string onto the middle of the dowel. A square piece of construction paper (about 12x12 cm) is taped to the other end of that string.	Hutchings Photography/Digital Light Source	
C240-10P-	Grandfather Holding His Grandson	PhotoLink/Getty Images	

C240-50P-	Science and Society feature - Color enhanced scanning electron micrograph (SEM) of a stem cell collected from human bone marrow. Stem cells are primitive cells that can multiply indefinitely, migrate to different parts of the body and develop into different types of tissue. Bone marrow retains the ability to generate stem cells throughout life. Bone marrow stem cells typically give rise to bone, blood and cartilage.	Andrew Paul Leonard/Photo Researchers	
C240-51P-	Science and Society Feature - National Marrow Donor Program - current logo (blue)	National Marrow Donor Program	
C240-52P-	Science and Society feature - Bone marrow. Scanning electron micrograph (SEM) of bone marrow in cancellous bone tissue. Bone tissue can be either cortical (compact) or cancellous (spongy). Cancellous bone is found in the center of the bone and is characterized by a honeycomb arrangement, comprising a network of trabeculae (fibrous tissue). These structures provide support and strength to the bone. The spaces between the trabeculae are filled with bone marrow (purple), which produces blood cells. Differentiating white blood cells (dark orange), part of the body's immune system, are seen here. Magnification: x500 when printed 10 centimeters wide.	Steve Gschmeissner/Photo Researchers	
MSS12_CLAY-MSS12P	clay	Hutchings Photography/Digital Light Source	
MSS12_TOY_CAR_POLICE-MSS12P	Toy police car	Stockdisc/Getty Images	
MSS12_TOY_TRUCK_RED-MSS12P	red toy truck	The McGraw-Hill Companies/Ken Karp photographer	
PM_GLUE.PSD-XPML08	Glue	Macmillan/McGraw-Hill	
C03-14P-874184	Pinus longaeva (Patriarch Picnic Area, Inyo National Forest, CA)	Dr. Daniel Nickrent/Southern Illinois University	

C03-14P-874184	Pinus longaeva (Patriarch Picnic Area, Inyo National Forest, CA)	Dr. Daniel Nickrent/Southern Illinois University	
C03-18P-874184	Corn silk: the female flower of the corn plant	Brad Mogen/Visuals Unlimited	
C03-18P-874184	Corn silk: the female flower of the corn plant	Brad Mogen/Visuals Unlimited	
C03-19P-874184-A	CLOSEUP OF MATURE FEMALE MAIZE KERNELS ON EAR, ZEA MAYS, MAIZE, ITHACA, NY V	Walter H. Hodge/Peter Arnold, Inc.	
C03-19P-874184-A	CLOSEUP OF MATURE FEMALE MAIZE KERNELS ON EAR, ZEA MAYS, MAIZE, ITHACA, NY V	Walter H. Hodge/Peter Arnold, Inc.	
C03-21P-874184-A	Snap Pea "Super Sugar Mel" pods close-up	Alan & Linda Detrick/Photo Researchers	
C03-21P-874184-A	Snap Pea "Super Sugar Mel" pods close-up	Alan & Linda Detrick/Photo Researchers	
C03-22P-874184-A	Common Dandelion (Taraxacum officinale) flower. Great Smoky Mountains National Park, Tennessee.	Adam Jones/Photo Researchers	
C03-22P-874184-A	Common Dandelion (Taraxacum officinale) flower. Great Smoky Mountains National Park, Tennessee.	Adam Jones/Photo Researchers	
C03-23P-874184	common dandelion seed head	CORBIS	
C03-23P-874184	common dandelion seed head	CORBIS	
C03-51P-874184	Wild Strawberries Hertfordshire UK Summer	Renee Morris/Alamy	
C03-51P-874184	Wild Strawberries Hertfordshire UK Summer	Renee Morris/Alamy	
C03-53P-874184	America's strawberry growers are testing various new methods of growing beautiful berries like this one without using methyl bromide, an effective but environmentally unfriendly soil fumigant that's scheduled for phaseout by 2005.	USDA/Photo Researchers	
C03-53P-874184	America's strawberry growers are testing various new methods of growing beautiful berries like this one without using methyl bromide, an effective but environmentally unfriendly soil fumigant that's scheduled for phaseout by 2005.	USDA/Photo Researchers	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	
C201-33P--A	Two plants one healthy and one wilting	The McGraw-Hill Companies	

C225-01P-	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	000-C
C225-01P-	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	000-C
C225-01P--A	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	
C225-01P--A	Chapter Opener: Dicot (Omphalea sp) vine tendril wrapping around supporting branch in tropical rainforest, Barro Colorado Island, Panama	Mark Moffett/Minden Pictures	
C225-02P-	Lesson 1 Opener: Gardenia leaf cross-section showing the thin waxy cuticle on the upper and lower surface of the leaf. The rectangular line of cells near top of the leaf just below the cuticle is the leaf epidermis containing epidermal cells but no chloroplasts. The lower cuticle is visible but the epidermal cells are not visible in this image. The cuticle and epidermis help to protect the leaf. SEM, X160.	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C225-02P-	Lesson 1 Opener: Gardenia leaf cross-section showing the thin waxy cuticle on the upper and lower surface of the leaf. The rectangular line of cells near top of the leaf just below the cuticle is the leaf epidermis containing epidermal cells but no chloroplasts. The lower cuticle is visible but the epidermal cells are not visible in this image. The cuticle and epidermis help to protect the leaf. SEM, X160.	Dr. Dennis Kunkel/Visuals Unlimited/Getty Images	
C225-03P-	Oak Leaves	Siede Preis/Getty Images	
C225-03P-	Oak Leaves	Siede Preis/Getty Images	
C225-04P-	Lesson 2 Opener: VENUS FLYTRAP with trapped fly prey Dionaea muscipula Native of swamps in North Carolina, south eastern USA	NHPA/Photoshot	
C225-04P-	Lesson 2 Opener: VENUS FLYTRAP with trapped fly prey Dionaea muscipula Native of swamps in North Carolina, south eastern USA	NHPA/Photoshot	

C225-05P-	(Oxalis species). Phototropism (also known as heliotropism) is the bending growth movement of parts of plants in response to a light stimulus.Movement produced by unequal growth is due to differences in auxin (a type of growth hormone) concentration.	Cathlyn Melloan/Getty Images	
C225-05P-	(Oxalis species). Phototropism (also known as heliotropism) is the bending growth movement of parts of plants in response to a light stimulus.Movement produced by unequal growth is due to differences in auxin (a type of growth hormone) concentration.	Cathlyn Melloan/Getty Images	
C225-06P-	Bindweed climbing round leaf of monocotyledon	Stephen Dalton/Minden Pictures	
C225-06P-	Bindweed climbing round leaf of monocotyledon	Stephen Dalton/Minden Pictures	
C225-07P-	Part 1 of 2 : Gravitropism (sometimes referred to as geotropism) is a plant response to earth's gravitational field. Plant stems (shoots) exhibit negative gravitropism because they respond by growing away from the gravitational attraction. Gravitropism is initiated when starch filled plastids called amyloplasts sink towards the gravitational field. This stimulates the release of the growth hormone auxin. This pea plant, Pisum sativum, shows a turn in its stem which occurred after its pot was tipped over. The response also occurs in the dark showing that it is not phototropism.	Martin Shields/Photo Researchers	
C225-07P-	Part 1 of 2 : Gravitropism (sometimes referred to as geotropism) is a plant response to earth's gravitational field. Plant stems (shoots) exhibit negative gravitropism because they respond by growing away from the gravitational attraction. Gravitropism is initiated when starch filled plastids called amyloplasts sink towards the gravitational field. This stimulates the release of the growth hormone auxin. This pea plant, Pisum sativum, shows a turn in its stem which occurred after its pot was tipped over. The response also occurs in the dark showing that it is not phototropism.	Martin Shields/Photo Researchers	
C225-08P-	Part 2 of 2: Pea (Pisum sativum) seedling emerging from soil.	Martin Shields/Photo Researchers	
C225-08P-	Part 2 of 2: Pea (Pisum sativum) seedling emerging from soil.	Martin Shields/Photo Researchers	

C225-09P-	Gibberellin-treated grapes on right, control grapes on left...	Sylvan Wittwer/Visuals Unlimited	
C225-09P-	Gibberellin-treated grapes on right, control grapes on left...	Sylvan Wittwer/Visuals Unlimited	
C225-100P-	two stalks of celery in BEAKERS with blue water in the bottom of each of the BEAKERS	Hutchings Photography/Digital Light Source	
C225-100P-	two stalks of celery in BEAKERS with blue water in the bottom of each of the BEAKERS	Hutchings Photography/Digital Light Source	
C225-101P-	student planting radishes in baggie. Open package of radish seeds should be on table while student places some seeds in the soil.	Hutchings Photography/Digital Light Source	
C225-101P-	student planting radishes in baggie. Open package of radish seeds should be on table while student places some seeds in the soil.	Hutchings Photography/Digital Light Source	
C225-102P-	pot of seedlings, preferably young radish seedlings. 3 toothpicks should be stuck in the soil so that they are parallel to three separate seedlings in the direction of the growth. The seedlings should be growing straight up. Place a gooseneck lamp near the pot, with the light turned toward the seedlings.	Hutchings Photography/Digital Light Source	
C225-102P-	pot of seedlings, preferably young radish seedlings. 3 toothpicks should be stuck in the soil so that they are parallel to three separate seedlings in the direction of the growth. The seedlings should be growing straight up. Place a gooseneck lamp near the pot, with the light turned toward the seedlings.	Hutchings Photography/Digital Light Source	
C225-103P-	long, narrow container with soil in it. A strip of each of the following is lying across the container next to one another: cardboard, vellum, plastic needlepoint grid. The container is next to a window.	Hutchings Photography/Digital Light Source	
C225-103P-	long, narrow container with soil in it. A strip of each of the following is lying across the container next to one another: cardboard, vellum, plastic needlepoint grid. The container is next to a window.	Hutchings Photography/Digital Light Source	
C225-104P-	Full-frame assortment of fruits and vegetables, including pineapple, apples, limes, grapes, bananas, onions, peppers, cabbages, carrots and potatoes	Ingram Publishing/SuperStock	
C225-104P-	Full-frame assortment of fruits and vegetables, including pineapple, apples, limes, grapes, bananas, onions, peppers, cabbages, carrots and potatoes	Ingram Publishing/SuperStock	

C225-105P-	student cutting out a flower petal from a piece of construction paper. Various craft supplies—chenille stems, tissue paper, construction paper, tag board, pom poms, plastic beads, bottle of glue—should be on the table.	Hutchings Photography/Digital Light Source	
C225-105P-	student cutting out a flower petal from a piece of construction paper. Various craft supplies—chenille stems, tissue paper, construction paper, tag board, pom poms, plastic beads, bottle of glue—should be on the table.	Hutchings Photography/Digital Light Source	
C225-106P-	student beginning to write a lab plan in a spiral bound notebook. Student should be wearing an apron and have goggles around his or her neck. A quad of plants should also be on the table.	Hutchings Photography/Digital Light Source	
C225-106P-	student beginning to write a lab plan in a spiral bound notebook. Student should be wearing an apron and have goggles around his or her neck. A quad of plants should also be on the table.	Hutchings Photography/Digital Light Source	
C225-10P-	Mature woman tending cucumber crops in greenhouse. Tadcaster, North Yorkshire, England.	Monty Rakusen/Getty Images	
C225-10P-	Mature woman tending cucumber crops in greenhouse. Tadcaster, North Yorkshire, England.	Monty Rakusen/Getty Images	
C225-11P-	Lesson 3 Opener: Dandelion in UV light. Colored photograph of a dandelion (<i>Taraxacum officinale</i>) showing the bull's-eye pattern of absorbed and reflected ultraviolet (UV) light on the flower head. These patterns are known as 'nectar guides' and help to attract pollinating insects, which can see UV light. Humans are unable to see these patterns. This image was taken using a digital camera adapted to filter and detect UV light. The resulting monochrome image was colored on computer. Areas that absorb UV light are dark in color, except the flower head which is colored red. UV light is outside the visible spectrum and does not have a true color.	Bjorn Rorslett/Photo Researchers	

C225-11P-	Lesson 3 Opener: Dandelion in UV light. Colored photograph of a dandelion (<i>Taraxacum officinale</i>) showing the bull's-eye pattern of absorbed and reflected ultraviolet (UV) light on the flower head. These patterns are known as 'nectar guides' and help to attract pollinating insects, which can see UV light. Humans are unable to see these patterns. This image was taken using a digital camera adapted to filter and detect UV light. The resulting monochrome image was colored on computer. Areas that absorb UV light are dark in color, except the flower head which is colored red. UV light is outside the visible spectrum and does not have a true color.	Bjorn Rorslett/Photo Researchers	
C225-12P-	Vegetative or asexual reproduction by a Hens-and-Chicks plant (<i>Sempervivum</i>)	Wally Eberhart/Visuals Unlimited/Getty Images	
C225-12P-	Vegetative or asexual reproduction by a Hens-and-Chicks plant (<i>Sempervivum</i>)	Wally Eberhart/Visuals Unlimited/Getty Images	
C225-14P-	White-footed Mouse (<i>Peromyscus leucopus</i>) eating a berry, Ohio.	Gary Meszaros/Visuals Unlimited/Getty Images	
C225-14P-	White-footed Mouse (<i>Peromyscus leucopus</i>) eating a berry, Ohio.	Gary Meszaros/Visuals Unlimited/Getty Images	
C225-15P-	Two <i>Pyracantha</i> cuttings one, with roots, has been treated with rooting compound	Nigel Cattlin/Photo Researchers	
C225-15P-	Two <i>Pyracantha</i> cuttings one, with roots, has been treated with rooting compound	Nigel Cattlin/Photo Researchers	
C225-16P-	Laboratory propagation flasks of plants growing under artificial lights in sterile conditions test tubes shows tissue culture	GardenPhotos.com/Alamy	
C225-16P-	Laboratory propagation flasks of plants growing under artificial lights in sterile conditions test tubes shows tissue culture	GardenPhotos.com/Alamy	
C225-17P-	Apical dominance comparing two runner bean plants where one has had the growing point removed	Nigel Cattlin/Alamy	
C225-17P-	Apical dominance comparing two runner bean plants where one has had the growing point removed	Nigel Cattlin/Alamy	
C225-19P-	A man pushes a cart of green bananas into a gas chamber for ripening.	B. ANTHONY STEWART/National Geographic Stock	
C225-19P-	A man pushes a cart of green bananas into a gas chamber for ripening.	B. ANTHONY STEWART/National Geographic Stock	

C225-20P-	Color enhanced scanning electron micrograph (SEM) of daisy (prickly), cherry (oblong), and hornbeam (round) pollen grains. Pollen is the bearer of the plant's male genetic component. Pollen can cause allergies on skin and mucous membranes of sensitive persons. Pollination season is from April to May. Magnification: 1100x.	Eye of Science/Photo Researchers	
C225-20P-	Color enhanced scanning electron micrograph (SEM) of daisy (prickly), cherry (oblong), and hornbeam (round) pollen grains. Pollen is the bearer of the plant's male genetic component. Pollen can cause allergies on skin and mucous membranes of sensitive persons. Pollination season is from April to May. Magnification: 1100x.	Eye of Science/Photo Researchers	
C225-21P-	Green peas	Comstock/PunchStock	
C225-21P-	Green peas	Comstock/PunchStock	
C225-22P-	Corn Seeds	Siede Preis/Getty Images	
C225-22P-	Corn Seeds	Siede Preis/Getty Images	
C225-23P-	Digitally-enhanced close-up of a dandelion clock (genus Taraxacum) dispersing its seeds against a blue sky with clouds	Ingram Publishing/SuperStock	
C225-23P-	Digitally-enhanced close-up of a dandelion clock (genus Taraxacum) dispersing its seeds against a blue sky with clouds	Ingram Publishing/SuperStock	
C225-24P-	Strawberries	Elizabeth Whiting & Associates/Alamy	
C225-24P-	Strawberries	Elizabeth Whiting & Associates/Alamy	
C225-25P-	Chapter Review Questions 5 & 6 - The clinging tendrils of the garden pea plant exhibit the biological phenomenon of thigmotropism, Ithaca, New York.	Scott Camazine/Photo Researchers	
C225-25P-	Chapter Review Questions 5 & 6 - The clinging tendrils of the garden pea plant exhibit the biological phenomenon of thigmotropism, Ithaca, New York.	Scott Camazine/Photo Researchers	
C225-26P-	ferns. Christmas Ferns, Polystichum acrostichoides, new growth.	Mark Steinmetz	
C225-26P-	ferns. Christmas Ferns, Polystichum acrostichoides, new growth.	Mark Steinmetz	
C225-27P-	green leaf	The Mcgraw-Hill Companies	
C225-27P-	green leaf	The Mcgraw-Hill Companies	

C225-28P-	Fern Canyon with stream in Redwood National Park, California	CARR CLIFTON/ MINDEN PICTURES/National Geographic Stock	
C225-28P-	Fern Canyon with stream in Redwood National Park, California	CARR CLIFTON/ MINDEN PICTURES/National Geographic Stock	
C225-29P-	Hairy-Cap Moss. Polytrichum SP. Shows Gametophytes Sporophytes w/ Stalk, Spore Case, Calyptra. H	Ed Reschke/Peter Arnold Inc.	
C225-29P-	Hairy-Cap Moss. Polytrichum SP. Shows Gametophytes Sporophytes w/ Stalk, Spore Case, Calyptra. H	Ed Reschke/Peter Arnold Inc.	
C225-30P-	Knarled bristlecone pine trees (Pinus aristata), some of which date from over 4000 years ago, grow at a height of 11000 feet, at the Patriarch Grove, in the Californian White Mountains, USA.	Andrew Brown; Ecoscene/CORBIS	
C225-30P-	Knarled bristlecone pine trees (Pinus aristata), some of which date from over 4000 years ago, grow at a height of 11000 feet, at the Patriarch Grove, in the Californian White Mountains, USA.	Andrew Brown; Ecoscene/CORBIS	
C225-31P-	organic Oregon Giant Snow Pea (Pisum sativum) flowering in home vegetable garden in the spring - Asheville, North Carolina, USA	Don Klumpp/Getty Images	
C225-31P-	organic Oregon Giant Snow Pea (Pisum sativum) flowering in home vegetable garden in the spring - Asheville, North Carolina, USA	Don Klumpp/Getty Images	
C225-50P-	Green Science feature - Cattle grazing on cleared Tropical Rain Forest land with tree stumps, Amazon region, Para, Brazil	Jacques Jangoux/Photolibary	
C225-50P-	Green Science feature - Cattle grazing on cleared Tropical Rain Forest land with tree stumps, Amazon region, Para, Brazil	Jacques Jangoux/Photolibary	
C225-51P-	Green Science feature - Maple Leaves Growing on a Branch	Digital Vision/Getty Images	
C225-51P-	Green Science feature - Maple Leaves Growing on a Branch	Digital Vision/Getty Images	

C225-52P-	Green Science feature - AMAZON - PERU, vicinity Satipo. Deforestation. Slash and burn migrant farmer cleaning land. The whole valley once forested have been cleared and only the steep slopes remain. Few settlers have the experience or knowledge to farm the poor soil on slopes recently under forest cover. Few bother with te¿	MARK EDWARDS/Peter Arnold, Inc.	
C225-52P-	Green Science feature - AMAZON - PERU, vicinity Satipo. Deforestation. Slash and burn migrant farmer cleaning land. The whole valley once forested have been cleared and only the steep slopes remain. Few settlers have the experience or knowledge to farm the poor soil on slopes recently under forest cover. Few bother with te¿	MARK EDWARDS/Peter Arnold, Inc.	
MSS12_RADISH_SEEDLINGS-MSS12P	Lab material shot of radish seedlings.	Stockdisc/PunchStock	
MSS12_RADISH_SEEDLINGS-MSS12P	Lab material shot of radish seedlings.	Stockdisc/PunchStock	
MSS12_SUN_SHIELDS-MSS12P	Shot of needlepoint plastic, card boards, and vellum	The Mcgraw-Hill Companies	
MSS12_SUN_SHIELDS-MSS12P	Shot of needlepoint plastic, card boards, and vellum	The Mcgraw-Hill Companies	
PM_SEED_GRAS S.PSD-XPML08	Seed Grass	Macmillan/McGraw-Hill	
PM_SEED_GRAS S.PSD-XPML08	Seed Grass	Macmillan/McGraw-Hill	
PM_SOIL_POTTI NG.PSD-XPML08	Soil Potting	Macmillan/McGraw-Hill	
PM_SOIL_POTTI NG.PSD-XPML08	Soil Potting	Macmillan/McGraw-Hill	
C03-25P-874184	African lions in breeding season.	Leonard Lee Rue III/Photo Researchers	

C233-01P-	Chapter Opener: Eastern Chimpanzee (<i>Pan troglodytes schweinfurthii</i>) baby 'Furaha' watches mother 'Fifi fish for termites, Gombe National Park, Tanzania	Anup Shah/Minden Pictures	000-0
C233-01P--A	Chapter Opener: Eastern Chimpanzee (<i>Pan troglodytes schweinfurthii</i>) baby 'Furaha' watches mother 'Fifi fish for termites, Gombe National Park, Tanzania	Anup Shah/Minden Pictures	
C233-02P-	Lesson Opener: dormouse hibernating	Worldwide Picture Library/Alamy	
C233-03P-	John Long and his bomb-sniffing dog, Coby, check luggage as they go through a drill at Lackland Airforce Base in San Antonio, Wednesday, Feb. 27, 2002. Long and Coby are in training, learning to work together and locate explosives in an airport environment.	Eric Gay/AP Images	
C233-04P-	Mourning Dove	Mark Steinmetz	
C233-05P-	MOURNING DOVES IN WINTER	Joseph Devenney/Getty Images	
C233-06P-	Cheetah (<i>Acinonyx jubatus</i>) chasing impala (<i>Aepyceros melampus</i>) Eastern Transvaal, South Africa	Steve Bloom/Getty Images	
C233-07P-	A fright reflex propels this armadillo into the air. Florida.	Bianca Lavies/National Geographic/Getty Images	
C233-08P-	Ruby-throated Hummingbird <i>Archilochus colubris</i> Male Petunia <i>Petunia x hybrida</i>	age fotostock/SuperStock	
C233-09P-	part one of two: hand feeding koi	Mark Steinmetz	
C233-100P-	student about to touch a pillbug in a Petri dish with a cotton swab	Hutchings Photography/Digital Light Source	
C233-101P-	student looking very sad (face in a frown) and another student standing next to them looking very happy (with a big grin)	Hutchings Photography/Digital Light Source	
C233-102P-	student tapping or rapping on desk, could show snapping fingers if motion is distinctive and obviously snapping not just a shot of fingers	Hutchings Photography/Digital Light Source	
C233-103P-	Tadpole in water, close-up	David J Green/Getty Images	
C233-104P-	Shot of a common frog sitting on the grass (<i>Rana Temporaria</i>)	IT Stock/age fotostock	
C233-105P-	Low angle view of a Black Bear (<i>Ursus americanus</i>) cub climbing in a dead tree	Purestock/PunchStock	

C233-106P-	Black Bear in Grass	Richard Wear/Design Pics/CORBIS	
C233-107P-	Two Caspian Tern (<i>Sterna caspia</i>) nestlings.	NPS Photo	
C233-108P-	Caspian Tern Wading in Water	CORBIS	
C233-109P-	One student gently (gloved hands) lifting a worm out of an open clear shoebox container filled with dirt; second student carefully holding worm with 1 gloved hand and other gloved hand supporting the worm underneath; should have gloves, goggles and aprons	Hutchings Photography/Digital Light Source	
C233-10P-	part two of two: empty hand draws attention of conditioned koi	Mark Steinmetz	
C233-110P-	photo of a student with a plastic shoebox filled with dirt (should be the same box as C233-109P). Student should be in the process of adjusting a gooseneck lamp over the box; the lamp should be far enough away so that it does not heat up the box unnecessarily.	Hutchings Photography/Digital Light Source	
C233-11P-	Sea otter (<i>Enhydra lutris</i>) breaking open a clam with a rock.	Thomas & Pat Leeson/Photo Researchers	
C233-12P-	Lesson Opener: Red Foxes playing in snow	Anna Henly/Getty Images	
C233-12P--A	Lesson Opener: Red Foxes playing in snow	Anna Henly/Getty Images	
C233-13P-	Apple core covered in ants	Photography EPC/Photolibrary	
C233-14P-	Genji firefly, <i>Luciola cruciata</i> , Japan	Satoshi Kuribayashi/Photolibrary	
C233-15P-	Spotted Hyena (<i>Crocuta crocuta</i>) group scavenging carcass in waterhole, Masai Mara Reserve, Kenya	SUZI ESZTERHAS/MINDEN PICTURES/National Geographic Stock	
C233-15P--A	Spotted Hyena (<i>Crocuta crocuta</i>) group scavenging carcass in waterhole, Masai Mara Reserve, Kenya	SUZI ESZTERHAS/MINDEN PICTURES/National Geographic Stock	
C233-16P-	Common Wild Cat / European Wild Cat	Arco Images GmbH/Alamy	
C233-17P-	Bowerbirds, Australia	Dave Watts/Tom Stack & Associates	
C233-18P-	Lesson Opener: Old world Swallowtail (<i>Papilio machaon</i>) emerged from chrysalis, Switzerland	Thomas Marent/Minden Pictures	
C233-19P-	Wood Frogs (<i>Rana sylvatica</i>)	John Cancalosi/Photolibrary	
C233-19P--A	Wood Frogs (<i>Rana sylvatica</i>)	John Cancalosi/Photolibrary	
C233-20P-	Grass snake (<i>Natrix natrix</i>) protecting it eggs Alsace France	PHONE PHONE - Auteurs Cordier Sylvain/Peter Arnold, Inc.	
C233-21P-	WESTERN GREY KANGAROO at teat <i>Macropus giganteus</i> two month old joey. Australia.	David Higgs/NHPA/Photoshot	

C233-22P-	GRASS SNAKE Natrix natrix young emerging from egg	Daniel Heuclin/NHPA/Photoshot	
C233-23P-	Rhode Island red rooster	Tim Hawley/Getty Images	
C233-24P-	Studio portrait of a Rhode Island Red chicken on a white background.	Michael Winokur/Getty Images	
C233-51P-	How it Works Feature - A male superb bird of paradise perching on a tree branch. Southern Highland, Papua New Guinea.	TIM LAMAN/National Geographic Stock	
C233-52P-	How it Works feature - Trees in jungle blurred for background of feature	Getty Images	
MSS12_LAMP-	close up of a lamp	Hutchings Photography/Digital Light Source	
MSS12_STRING-MSS12P	Ball of string	Hutchings Photography/Digital Light Source	
PM_ANIMAL_EARTH WORM.PSD-XPML08	Animal Earthworm	Macmillan/McGraw-Hill	
PM_ANIMAL_MEAL WORM.PSD-XPML08	Animal Mealworm	Macmillan/McGraw-Hill	
PM_CONTAINER_CLEAR_WSHBX.PSD-XPML08	Container Clear wShBx	Macmillan/McGraw-Hill	
PM_SAND_FINE.PSD-XPML08	Sand Fine	Macmillan/McGraw-Hill	
PM_SOIL_POTTING.PSD-XPML08	Soil Potting	Macmillan/McGraw-Hill	
C03-06P-874184	Male mallard, <i>Anas platyrhynchos</i> . A familiar species widely distributed throughout the northern hemisphere. Photo taken in Llano Co., TX.	Nature's Images/Photo Researchers	
C03-07P-874184	Female mallard, <i>Anas platyrhynchos</i> . A familiar species widely distributed throughout the northern hemisphere. Photo taken in Llano Co., TX.	Nature's Images/Photo Researchers	
C03-08P-874184	Utah, Salt Lake City, This baby duck was abandoned by its mother and has adopted a chicken as its new mommy.	Jeremy West/Getty Images	

C03-32P-874184	E.coli or other bacterium in late stages of fission, before the two daughter cells have completely separated	CNRI/Photo Researchers	
C03-39P-874184	DOLLY AND SURROGATE MOTHER	Roslin Institute	
C03-44P-874184	Set-up - lesson 4 MiniLab - Show a microscope with a beaker containing a yeast-sugar-water solution	Horizons Companies	
C205-02P-	Lesson Opener: Light micrograph of bluebell (<i>Endymion</i> sp.) anther cells in meiosis. Meiosis (at right frame) is a reduction division of the cell nucleus to produce cells with one set of chromosomes. The first stage (Prophase I) is the visible condensing and pairing of chromosomes (upper center). At the next stage (Metaphase I) the chromosomes attach to a spindle on the cell's midline (most are at this stage). The chromosomes then move to the spindle poles (Anaphase I) seen at bottom center. The cell then divides and the nuclear membrane reforms (Telophase I). These stages are repeated (Prophase II-Telophase II) to produce 4 haploid cells. Magnification: x100 at 35mm size	Science Pictures Ltd./Photo Researchers	
C205-06P-	MEIOSIS 1, PROPHASE 1 (1st Division), <i>Lilium</i> (Lily), 400X at 35mm	Ed Reschke/Peter Arnold, Inc.	
C205-07P-	MEIOSIS 1, METAPHASE 1 (1st Division), <i>Lilium</i> (Lily), 400X at 35mm	Ed Reschke/Peter Arnold, Inc.	
C205-08P-	MEIOSIS 1, ANAPHASE 1 (1st Division), <i>Lilium</i> (Lily), 400X at 35mm. Chromosomes are moving toward the poles, spindle fibers visible.	Ed Reschke/Peter Arnold, Inc.	
C205-09P-	MEIOSIS 1, TELOPHASE 1 (1st Division), <i>Lilium</i> (Lily), 400X at 35mm. Shows the cell plate and spindle fibers.	Ed Reschke/Peter Arnold, Inc.	

C205-100P-	Show two students sitting at a table. On the table in front of them are two brown-paper lunch bags side by side. One is labeled "Male Parent" and the other is labeled "Female Parent". Use a black sharpie to label bags. The top of male-parent bag is open. One student has his or her hand in the male-parent bag. The other has paper and a pencil and appears to be recording data. There are 2 red beads on the table in front of the male-parent bag. The female-parent bag had its top folded over a couple of times.	Hutchings Photography/Digital Light Source	
C205-102P-	Lesson 2 Minilab - Sprouting potato/asexual plant reproduction	sciencephotos/Alamy	
C205-103P-	our students standing each holding a swimming noodle of a different color. Two students hold long noodles that are the same length and two hold short noodles that are the same length.	Hutchings Photography/Digital Light Source	
C205-104P-	our students standing each holding a swimming noodle. Two students hold long noodles that are the same length and the same color and two hold short noodles that are the same length and the same color. A student with a long noodle and a student with a short noodle are parents. The two groups of partners appear to be walking away from each other.	Hutchings Photography/Digital Light Source	
C205-105P-	Lesson 2 Minilab: Close-up of a Spider plant (Chlorophytum comosum)	DEA/G.CIGOLINI/Getty Images	
C205-106P-	Lesson 2 Minilab: Vegetative Reproduction of a Rex Begonia (Begonia rex).	Jerome Wexler/Photo Researchers	
C205-10P-	MEIOSIS 2, PROPHASE 2 (2nd Division), Liliium (Lily), 400X at 35mm	Ed Reschke/Peter Arnold, Inc.	
C205-11P-	MEIOSIS 2, METAPHASE 2 (2nd Division), Liliium (Lily), 400X at 35mm. The chromosomes are lined up on the equator.	Ed Reschke/Peter Arnold, Inc.	
C205-12P-	MEIOSIS 2, ANAPHASE 2 (2nd Division), Liliium (Lily), 400X at 35mm	Ed Reschke/Peter Arnold, Inc.	
C205-13P-	MEIOSIS 2, TELOPHASE (2nd Division), Liliium (Lily), 400X at 35mm	Ed Reschke/Peter Arnold, Inc.	
C205-14P-	Leaves of the Tapioca plant also know as Cassava scientific name Manihot Esculenta	Rob Walls / Alamy	
C205-15P-	African cassava mosaic virus symptoms on cassava leaves	Nigel Cattlin/Alamy	

C205-16P-	Brassicaceae - Brassica rapa	Piotr & Irena Kolasa/Alamy	
C205-17P-	Broccoli rabe (brassia rapa)	Stockbyte/Getty Images	
C205-18P-	bok choy (brassica rapa)	image100/SuperStock	
C205-19P-	Kohlrabi growing in soil, Early Purple Vienna Variety	Wally Eberhart/Visuals Unlimited/Getty Images	
C205-20P-	Napa Cabbage (Brassica rapa)	Craig Lovell/CORBIS	
C205-21P-	Plantlets of Kalanchoe along a leaf showing vegetative or asexual reproduction.	Dr. Brad Mogen/Visuals Unlimited	
C205-22P-	Light microscopy of an amoeba proteus during binary fission, a type of asexual reproduction, whose cell division is nearly complete. LM 50x at 35mm.	Biophoto Associates/Photo Researchers	
C205-23P-	Hydra oligactilis producing asexually by forming buds.	Biophoto Associates/Photo Researchers	
C205-24P-	Hydra oligactilis producing asexually by forming buds	Biophoto Associates / Photo Researchers, Inc.	
C205-26P-	Strawberry runners from plants growing in terraced garden containers (Frageria)	Wally Eberhart/Visuals Unlimited	
C205-27P-	Crabgrass (Digitaria sanguinalis) quickly colonizing bare spots in lawn turf	Mark Steinmetz	
C205-29P-	Chapter Opener: Emperor penguins (Aptenodytes forsteri) with chick standing on ice. Aptenodytes forsteri, Snow Hill Island, Antarctica	Bill Coster/Getty Images	000-C
C205-30P-	AMNH feature - Norman Platnick, arachnologist at the American Musuem of Natural History.	Greg Broussard	
C205-31P-	AMNH feature - garden spider: araneus diadematus male courting female u.k .	David Thompson/Photolibrary	
MSS12_SWIMMING_NOODLES-MSS12P	4 Long swimming noodles and 4 short swimming noodles. Pairs of noodles should be matching in color. See go-by. This go-by is to show swimming noodles in pairs. Actual photo will NOT have a model. The short pairs on the left are 1/2 the length of the longer orange one and there is no pair for the orange (didn't have another orange one in the garage). The shortest green ones are probably too short for this demo , but show some nice bumps that differentiate them from the others.	Hutchings Photography/Digital Light Source	

MSS12_SWIMMI NG_NOODLES- MSS12P-A	4 Long swimming noodles and 4 short swimming noodles. Pairs of noodles should be matching in color. See go-by. This go-by is to show swimming noodles in pairs. Actual photo will NOT have a model. The short pairs on the left are 1/2 the length of the longer orange one and there is no pair for the orange (didn't have another orange one in the garage). The shortest green ones are probably too short for this demo , but show some nice bumps that differentiate them from the others.	Digital Light Source	
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