Teacher-Supplied Materials: Fast Track

BioTech Systems Worldwide				
Material	How Material Is Used	Quantity	Driving Question	Fast Track Lesson
Poster or chart paper	Used for the Anchor Phenomenon chart and academic word wall	2 sheets	1	1
	Used to make the Science Tools poster	1 sheet	1	5
	Used to make the Cell Parts and Their Function chart	1 sheet	3	3
Marker pen	Used for the Anchor Phenomenon chart	1 sheet	1	1
Scissors	Used to design prosthetic hands	1 pair per student	4	1, 2
Index cards	Used in Stimulus Response activity	1 pack of 100	1	2
Ruler	Used to play a stimulus-response game using a dropped-ruler method	1 per pair	1	2
Calculator	Used to calculate averages in the stimulus-response game	1 per pair	1	2

Rubber bands, size #60	Used in Modeling the Excretory System and Prosthetic Arm design and build	2 packs of 100 = 200	1	4
		2 packs of 100 = 200	4	1, 2
Jug	Used to hold a mixture of cornstarch and water	1	1	4
Plastic bottles (0.5–1.5 L)	Used to investigate and observe what the human hand does when it picks up a water bottle and to test prosthetic hand designs	2–3 per team	4	3
Water	Used to create models of the excretory system	Around 400 mL (about 14 fl. oz.)	1	4
Coffee filters	Used in Modeling the Excretory System	1 pack of 40	1	4
Food colorings	Used in Modeling the Excretory System	1 pack of 4	1	4
Cornstarch	Used to create models of the excretory system	4 tsp	1	4
Plastic cup (clear)	Used to create models of the excretory system	4	1	4
Jumbo craft sticks	Used in Prosthetic Arm design and build	2 packs of 80 = 160	4	1, 2
Straws	Used in Prosthetic Arm design and build	2 packs of 100 = 200	4	1, 2

Duct tape	Used in Prosthetic Arm design and build	2 rolls	4	1, 2
Twist ties	Used in Prosthetic Arm design and build	4 packs of 35 = 140	4	1, 2
Regular craft sticks	Used in Prosthetic Arm design and build	1 pack of 250	4	1, 2
Paper clips	Used in Prosthetic Arm design and build	2 packs of 100 = 200	4	1, 2
Hole punch	Used to design prosthetic hands	1 per team	4	1, 2
Masking tape	Used in Prosthetic Arm design and build	3 rolls	4	1, 2
Computer or tablet with spreadsheet software	Used to view past videos	1 per pair	1	5
	Used to play videos and for online research	1 per pair	2	1
	Used to display the interactive	1 per pair	3	1

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Destination Everywhere!				
Material	How Material Is Used	Quantity	Driving Question	Fast Track Lesson
Scissors	Used to prepare cardboard homes	1 pair per team	3	1
	Used to cut cardboard	1 pair	4	3
Rulers	Used as part of the Land and Water investigation	1 per team	2	3
	Used in the Cardboard Home activity	1 per team	3	1
		1 per team and 1 for the teacher	3	2
	Used as part of the equipment station	1	3	3
Tape	Used in the Sunlight on Earth investigation	1 roll per team	2	7
	Used to display the T-chart poster	1 roll	2	9
	Used to modify initial home designs	1 roll per team	3	2

Colored pencils (red, blue, yellow, and green)	Used to add climate color-coding to maps	A selection per student	1	1
	Used to draw models of the Air Mass investigation	1 blue and 1 red per student	4	3
	Used to make posters	1 set per pair	4	5
Flashlights	Used in the Modeling Temperature Bands investigation	8	2	7
Flashlight batteries	Used in the Modeling Temperature Bands investigation	8	2	7
Stopwatches	Used for timings in multiple investigations	16	2	3
		16	3	1, 2, 3, 4
White paper	Used behind the plastic tank so students can see the interaction during the investigation	1 sheet	4	3
Utility knife	Used in the Solar Home lab	1	3	1, 2
Poster or chart paper	Used for the Anchor Phenomenon chart and academic word wall	2 sheets	1	1
	Used to create a T-chart	1 sheet	2	9
	Used to create the Cold Climate Homes chart	1 sheet	3	1
	Used to make posters	1 sheet per pair	4	5

Clear plastic containers **Note:** These need to be long enough for a plastic bottle with a cap to lie horizontally.	Used for the Evaporation investigation	2 or 3	1	3
	Used for the Making Rain investigation	2 or 3	2	1
	Used for the Air Pressure investigation	2	2	4
Water	Used for the Evaporation investigation	Enough to fill 2 or 3 clear plastic containers	1	3
	Used as part of the Land and Water investigation	Enough to fill 16 10 oz plastic cups and 16 16 oz plastic containers	2	3
Clear plastic jars, 8 oz	Used in Rain Making lab	24 jars	2	1
Hot water	Used in the Air Pressure investigation	Enough to half fill the clear plastic container	2	4
Plastic cups, 10 oz	Used in Heating and Cooling investigations and House Floor Plan investigations	1 pack of 30	2	3
		1 pack of 30	3	3, 4
Warm water	Used in the Air Mass Interactions investigation	3 2-liter bottles	4	3
Cold water	Used in the Air Mass Interactions investigation	3 2-liter bottles	4	3
Pack of balloons	Used in the Air Pressure demo	1 pack of 24	2	4

Ice water	Used in the Air Pressure investigation	Enough to half fill the clear plastic container	2	4
Tray	Used to organize resources for hands-on investigations	1 per team	2	1, 3
			3	1, 2, 4
Plastic water bottle with cap **Note:** Ensure the bottle is made of thin plastic.	Used in the Air Pressure investigation	1	2	4
Paper towels	Used to clean up spills	6 packs	2	1, 2, 3
Duct tape	Used in the Solar Home lab	1 roll	3	1
Labels	Used to label cups with the mass of cork they contain	1 pack	3	4
Cardboard	Used in the Air Mass Interaction demonstration	2	4	3
Protractors	Used to complete the challenge	1 per student	2	7
Dry-erase marker	Used to mark the water level in the Evaporation investigation	1	1	3
Blue and black markers	Used to write on the Anchor Phenomenon chart	1 black	1	1
	Used in the Modeling Sunlight investigation	1 blue and 1 black per team	2	7

Computers or tablets	Used to display the interactive	1 per pair	1	1, 3
	Used to access an online map		1	5
	Used to do research		2	10
	Used to access spreadsheet software	1 per team	3	5
	Used to make digital presentations	1 per pair	4	5
Ceramic plates	Used as part of the Making Rain investigation	1 per team	2	1
Chart of 10-day weather for local area	Shown to students so they can compare it to their observed weather over several lessons	1	4	1
Large jug	Used to distribute hot water for the Making Rain investigation	1	2	2
Clear plastic bag	Used to place over the leaf in the Transpiration investigation	1	2	2
Rubber band	Used to seal the bag around the leaf of the plant in the Transpiration investigation	1	2	3
Ice cubes	Used as part of the Making Rain investigation	5 per team	2	1
	Used as part of the Land and Water investigation	Enough per team to fill the plastic bucket	2	3

Live plant	Used as part of the Transpiration investigation	1	2	2
Old towels	Used to mop up large spills during the Air Pressure investigation	2	2	4
Recent video of a weather report	Used as part of a discussion and to compare to students' learning	1	4	1
Recording devices (e.g., tablet, camera)	Used to record videos for presentations	1 per pair	4	5

Teacher-Supplied Materials: Fast Track

The Red List				
Material	How Material Is Used	Quantity	Driving Question	Fast Track Lesson
Pipe cleaners	Used to model chromosomes	2 packs of 100 = 200	2	2
Scissors	Used in the Butterfly Modeling activity	1 per pair **Note:** Pairs can share.	2	4

Calculators	Used to calculate percentages	1 per student	1	3
			3	1
Glue or clear tape	Used in the Butterfly Modeling activity	1 bottle per pair **Note:** Pairs can share.	2	4
Colored pencils (red, blue, yellow, and green) **Note:** The pencils need to be the same colors as the beads.	Used to sketch and label butterfly chromosomes	1 set per team	2	2
Poster or chart paper	Used for the Anchor Phenomenon and academic word wall	2 sheets	1	1
	Used to create the Claim-Evidence-Reasoning chart	3 sheets	1	3, 4, 5
	Used to create the Seed Dispersal chart	1 sheet	1	5
	Used to create the Threats to Species chart	1 sheet	4	1
Brown and green markers	Used in the Butterfly Modeling activity	1 brown and 1 green marker per pair	2	4
Marker pen	Used to write on the Anchor Phenomenon chart	1	1	1
	Used to write on masking tape		Benchmark Assessment	

Sticky notes	Used to brainstorm questions about the Anchor Phenomenon	1 pack	1	1
Computers or tablets with spreadsheet software	Used to research endangered species	1 per team	1	1
	Used to watch videos	1 per pair	1	2
	Used to research pollination	1 per student	1	4
	Used to research a chosen species	1 per student	4	2, 3
Endangered Species Cards	Used for Endangered Species activity (must be printed from the link provided)	8 sets	4	1
Coin	Used to determine the genes/alleles passed on to offspring with a coin toss	1	2	5
Research materials about endangered species (books/online sources)	Used to research endangered species	A variety for the class	1	1
			4	2, 3
Pennies	Used to investigate traits	4 per pair	Benchmark Assessment	
Masking tape	Used to mark pennies	1 roll	Benchmark Assessment	

Teacher-Supplied Materials: Fast Track

Cities of the Future				
Material	How Material Is Used	Quantity	Driving Question	Fast Track Lesson
Index cards	Used for students' environmental topics	2 packs of 100 = 200	1	1
Non-latex gloves	Used to follow safety guidance in Testing Water Samples lab	1 box of 100	1	3
Stopwatches	Used for timings in multiple investigations	16	1	3
Bottle of distilled water	Used in Testing Water Samples lab	1 bottle	1	3
Safety goggles (student size)	Used in Water Pollution Lab to follow safety recommendations	3 packs of 10 = 30	1	3
Safety goggles (adult size)	Used in Water Pollution Lab to follow safety recommendations	1 pair	1	3
Plastic wrap	Used in Greenhouse Gas lab	1 roll	2	2
Scissors	Used in the Greenhouse Model demonstration	1 pair per team	2	2
	Used to cut out a handout		4	6

Tape	Used in the Greenhouse Model demonstration	2 rolls	2	2
	Used to tape together multiple graphs		2	5
Set of Greenhouse Gas cards	Used in Greenhouse Gas activity (must be printed from the link provided)	9 sets	2	3
Colored pencils (red, blue, yellow, and green) **Note:** If possible, select lighter colors for the first lesson. Students are likely to add more details to their design throughout the DQ.	Used to design model communities	1 set per team	4	4, 5, 6
White paper	Used in the Greenhouse Model demonstration	1 sheet	2	2
2 L plastic bottle	Used in the Greenhouse Model demonstration	2 bottles	2	2
Glue	Used to glue a handout to posters	1 bottle per team **Note:** Or teams can share	4	6
Large rubber band	Used in the Greenhouse Model demonstration	1	2	2
Dry-erase markers **Note:** Two different colors	Used in the Greenhouse Model demonstration	2	2	2

Marker pen	Used to write on the Anchor Phenomenon chart	1	1	1
Chart paper	Used for the Anchor Phenomenon chart	1 sheet	1	1
	Used for the academic word wall	1 sheet	1	3
	Used for the Environmental Impact Study Site charts	3 sheets	1	4
	Used to create the Climate Change Argument chart	1 sheet	2	1
	Used to create posters	1 sheet per team	4	6
Computers or tablets with spreadsheet software	Used to watch a video	1 per team	1	1
	Used to display the interactive	1 per pair	2	1
	Used to access websites with a carbon footprint calculator and cool climate maps	1 per student/pair	4	1
	Used to play videos	1 per team	4	3