

Science Academies for Grades 5-8, Part 2 Materials

Grade 5

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 3	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
Engage RM 1 – project for class						
Explore RM 2 – participants can view in guide	marbles (16mm)	90-130	9-13			X
	marbles (25mm)	10-30	1-3			X
	meter stick	10	1		K4P1	
	sidewalk chalk (optional)	10 sticks	1 stick			X
	sorting circle	10	1		K4P1	
	string (optional)	20 meter length	2 meter length		K4P1*	X
	tape (only necessary if using string)	10 rolls	1 roll		K4P1*	X
	clock or timing device	1	for teacher only			
Explain RM 3 – participants can view in guide RM 4 – copy on white paper						

**Check quantity in previous Academy kit before purchasing*

K4P1 = Science Academies for Grades K-4, Part 1; **58P1** = Science Academies for Grades 5-8, Part 1; **Bio** = Biology EOCS; **Chem1** = Chemistry EOCS, Part 1; **Chem2** = Chemistry EOCS, Part 2; **Phys** = Physics EOCS

Science Academies for Grades 5-8, Part 2 Materials

Grade 5

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed...	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
<p>Elaborate RM 5 – participants can view in guide RMs 6-7 – print according to instructions in lesson</p>	aluminum foil	1 box	Materials will be bagged according to the cards on RM 7.			X
	bar magnet	2			K4P1	
	brick	1				X
	bubble wrap	1 meter length				X
	chalk	5-10 sticks				X
	clear tape gift wrap dispenser	2				X
	coffee filter	2				X
	foam ball (6-8 cm in diameter)	1				X
	foam board	3-5 sheets				X
	freezer paper	1 box				X
	goggles	6-10				K4P1, 58P1, Bio, Chem1, Chem2
	horseshoe magnet	2				K4P1
	magnetic wand	2				K4P1
	masking tape	5-10 rolls				K4P1*

K4P1 = Science Academies for Grades K-4, Part 1; **58P1** = Science Academies for Grades 5-8, Part 1; **Bio** = Biology EOCS; **Chem1** = Chemistry EOCS, Part 1; **Chem2** = Chemistry EOCS, Part 2; **Phys** = Physics EOCS

Science Academies for Grades 5-8, Part 2 Materials

Grade 5

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed...	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase	
Elaborate (continued)	meter sticks	10			K4P1		
	paper clips	30				X	
	paper cup, 3 oz.	3				X	
	plastic toy soldier	2				X	
	ring magnet	2			K4P1		
	rubber bands (medium-size)	6-8				X	
	sandpaper (coarse)	6-8 sheets				X	
	spray bottle	3				X	
	spring scale (5 N and 10 N)	3 each			K4P1		
	staples	75-100				X	
	straws	5				X	
	string	10 meter length				K4P1*	X
	textbook (substitute manuals/guides)	3					X
	timing device	3				K4P1	
towel	2					X	

**Check quantity in previous Academy kit before purchasing.*

Science Academies for Grades 5-8, Part 2 Materials

Grade 5

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed...	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
Elaborate (continued)	toy car	2	Materials will be bagged according to the cards on RM 7.			X
	wax paper	1 box				X
	wooden block (heavy)	1				X
	alcohol wipes (to clean goggles)	1 box			K4P1, Bio, Chem1, Chem2, Phys*	X
	access to technology					
	cardstock		for teacher only			
	sandwich-size resealable plastic bags		2 for teacher			
Evaluate RM 8 – participants can view in guide						

**Check quantity in previous Academy kit before purchasing.*

Science Academies for Grades 5-8, Part 2 Materials

Grade 6

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 3	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
<p>Engage RM 1 – project for class</p>						
<p>Explore RM 2 (pages 1-2, 5) – participants can view in guide RM 2 (pages 3-4, 6-7) – copy on white paper</p>	meter sticks	20	2		K4P1	
	sticky notes, flags, or dot stickers	10 pads	1 pad			X
	timing device	10	1		K4P1	
	windup toy that moves forward	10	1		K4P1*	X
	calculator (optional)	30	1		Phys*	

**Check quantity in previous Academy kit before purchasing.*

Science Academies for Grades 5-8, Part 2 Materials

Grade 6

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed...	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
<p>Explain RM 3 – participants can view in guide RM 4 – copy on white paper</p>	computer cord for motion sensor	1	for class	X		
	computer or laptop	1				X
	Go!Motion sensor	6	1 per group of 5	X		
	calculator cord for motion sensor	6		X		
	large sheet of foam board	6				X
	meter stick	6			K4P1	
	graphing calculator (TI-83/84 Plus)	6			Chem1	
	blue dry erase or poster marker	1	for teacher			X
	orange dry erase or poster marker	1				X
	sticky dots	1 package				X
	graphing chart paper	1 pad				X
	colored pencils (at least two different colors)	60	2 per student			X

**Check quantity in previous Academy kit before purchasing.*

K4P1 = Science Academies for Grades K-4, Part 1; **Chem1** = Chemistry EOCS, Part 1; **Phys** = Physics EOCS

Science Academies for Grades 5-8, Part 2 Materials

Grade 6

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Each Student	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
Elaborate RM 7 – print according to directions in the Presenter Notes book	graph paper	30 sheets	1 sheet			X
	calculator (optional)	30	1		Phys*	
Evaluate RM 8 – participants can view in guide						

Science Academies for Grades 5-8, Part 2 Materials

Grade 7

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 3	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
<p>Engage RM 1 – participants can view in guide</p>	half-sheet of blank paper	30	1 per student			X
<p>Explore RM 2 – participants can view in guide</p>	meter stick or metric measuring tape	10	1		K4P1	
	push-pull spring scale (5N or 10N)	10	1		K4P1	
	sand or gravel	1 bag				X
	small bottle with lid, such as a small soda bottle	10	1			X
	small screw hook/screw eye	10 screws	1 screw			X
<p>Explain Completed RM 2 – each participant should have this from Explore RMs 3-4 – participants can view in guide</p>	access to a glossary or dictionary is optional; digital access can be used in training					

Science Academies for Grades 5-8, Part 2 Materials

Grade 7

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 3	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
<p>Elaborate RMs 1 and 5 – participants can view in guide</p>	metric ruler, meter stick or metric measuring tape (from Explore)	10	1		K4P1	
	load object (from Explore)	10	1			
	push-pull spring scale (from Explore)	10	1		K4P1	
	two different lengths of cardboard or foam board to use as inclined planes For example: <ul style="list-style-type: none"> • one 15 cm x 40 cm length • one 15 cm x 55 cm length The lengths may be adjusted based on the height of the box or crate used in the activity.	10 of each size	1 pair		K4P1*	X
	empty cardboard box or plastic crate	10	1			X
<p>Evaluate RM 6 – participants can view in guide</p>						

**Check quantity in previous Academy kit before purchasing.*

Science Academies for Grades 5-8, Part 2 Materials

Grade 8, Lesson 1

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 3	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy kit	Purchase
Prelesson Sort - print on cardstock (These materials are a one-time purchase to use as part of the training set.)	file folders	10	1			X
	Velcro dots (to be placed on back of 11 sort cards)	110 dots	1 set of 11 dots			X
	Velcro strips (two long strips in each file folder)	at least 24 feet	2 long strips			X
Engage RM 1 – print on cardstock, cut and store in bags	string or yarn	80 foot length	8 foot length divided into 3' and 5' sections			X
Explore RM 2 – participants can view in guide	safety glasses	30	3		Phys	
	small sphere (golf ball or tennis ball)	10	1			X
	variety of materials such as additional balls, blocks, rulers, meter sticks, books, boxes, etc.				K4P1*	
	alcohol wipes (to clean glasses)	1 box			K4P1, Bio, Chem1, Chem2, Phys*	X

*Check quantity in previous Academy kit before purchasing.

K4P1 = Science Academies for Grades K-4, Part 1; **Bio** = Biology EOCS; **Chem1** = Chemistry EOCS, Part 1; **Chem2** = Chemistry EOCS, Part 2; **Phys** = Physics EOCS

Science Academies for Grades 5-8, Part 2 Materials

Grade 8, Lesson 1

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 5	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy kit	Purchase
<p>Explain RMs 3 and 5 – participants can view in guide RM 4 page 1 – print on cardstock and cut into bookmarks RM 4 page 2 – printing optional</p>	sticky notes	10-20 pads	1-2 pads			X
<p>Elaborate RM 6 – participants can view in guide</p>	AA batteries for each cart (4 per cart)	48	8			X
	fan carts	12	2	X		
	large rubber bands to connect fan carts (#117B file bands)	6-12	1-2			X
<p>Evaluate RM 7 – participants can view in guide</p>						

Science Academies for Grades 5-8, Part 2 Materials

Grade 8, Lesson 2

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 5	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
Engage RM 1 – print on cardstock, cut out, and store in bag	chart paper (optional)	1 pad	1 sheet			X
	masking tape or chalk (optional)	6	1		K4P1*	
Explore RM 2 – participants can view in guide RM 3 – print on copy paper for each participant	safety glasses	30	5		Phys	
	alcohol wipes (to clean glasses)				K4P1, Bio, Chem1, Chem2, Phys*	X
	Hall's carriage cart	6	1	X		
	push-pull spring scale (5N or 10N)	6	1		K4P1	
	meter sticks	12	2		K4P1	
	objects to add mass (marbles, pennies, known mass set, etc.)	6 sets	1 set		Phys	X
	foam board for a ramp (from Grade 7 lesson)	6	1			X
	1" blocks (or a book) for ramp	12	2			X
	small container of sand or gravel (Can use load object from grade 7 lesson)	6	1			X

*Check quantity in previous Academy kit before purchasing.

K4P1 = Science Academies for Grades K-4, Part 1; **Bio** = Biology EOCS; **Chem1** = Chemistry EOCS, Part 1; **Chem2** = Chemistry EOCS, Part 2; **Phys** = Physics EOCS

Science Academies for Grades 5-8, Part 2 Materials

Grade 8, Lesson 2

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 5	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
Explore (continued)	masking tape or painters tape (optional)	6 rolls	1 roll			
	hot glue or other adhesive to glue plastic (optional)	1 bottle or package	for teacher only			
	small, plastic containers or film canisters (optional)	6	for teacher only			
Explain RM 4 – cardstock (1 copy per 2 students) RMs 5-6 – participants can view in guide RMs 6-7 – project for class	cardstock	30 sheets	5 sheets			X
	brass paper fasteners	2 boxes of 100	15			X
	chart markers	6 packs	1 pack			X
	chart paper	1 pad	1 sheet			X
	highlighters (optional)	30	5			X
	sticky notes	6 pads	1 pad			X
	scissors	30	1			
	hole punch	6	1			

**Check quantity in previous Academy kit before purchasing.*

K4P1 = Science Academies for Grades K-4, Part 1; **Bio** = Biology EOCS; **Chem1** = Chemistry EOCS, Part 1; **Chem2** = Chemistry EOCS, Part 2; **Phys** = Physics EOCS

Science Academies for Grades 5-8, Part 2 Materials

Grade 8, Lesson 2

Lesson	Materials	Quantity Needed for 30 Participants	Quantity Needed for Group of 5	Provided by Grades 5-8, Part 2 Academy	Included in previous Academy Kit	Purchase
<p>Elaborate RMs 5 and 8 – participants can view in guide</p>						
<p>Evaluate RMs 9-10 – participants can view in guide</p>						