

SLINGSHOTS, CROSSBOWS, & CATAPULTS, OH MY!



TEACHER GUIDE

WONDER



PLANNING

Here's a suggested schedule for this kit! The activities are designed to be completed in order, but you can decide when to do them over time. The time required for each lesson may vary.

ACTIVITY INFORMATION	SECTION(S)	TIME REQUIRED	DAY/ LESSON
ACTIVITY 1: EXPLODING POPSICLE STICKS Watch popsicle sticks “explode” and launch gummy bears. Time required: 30 min	<input type="checkbox"/> Popsicle Stick Chain Reaction	30 minutes	Day 1
	<input type="checkbox"/> Gummy Bear Slingshot	30 minutes	Day 2
ACTIVITY 2: SLINGSHOT SCIENCE Build and test a gummy bear slingshot. Time required: 1 h 15 min	<input type="checkbox"/> How it Moves <input type="checkbox"/> People’s Problems	45 minutes	Day 3
	<input type="checkbox"/> Gummy Bears and Popsicle Sticks	45 minutes	Day 4
ACTIVITY 3: COOL CROSSBOWS Use a crossbow to determine which types of objects launch further and more accurately. Time required: 1 h 15 min	<input type="checkbox"/> Engaged with Energy	30 minutes	Day 5
	<input type="checkbox"/> Gummy Bear Catapult	30 minutes	Day 6
ACTIVITY 4: CATAPULTING SCIENCE Learn about launching objects in an arch. Time required: 1 h	<input type="checkbox"/> Different Ways to Solve a Problem	30 minutes	Day 7
	<input type="checkbox"/> Make a Plan	30 minutes	Day 8
ACTIVITY 5: THE BEST TOOL Design and test a launcher you designed. Time required: 2 h	<input type="checkbox"/> Build Your Launcher	30 minutes	Day 9
	<input type="checkbox"/> Test Your Launcher	30 minutes	Day 10
	<input type="checkbox"/> Reflect and Revise	30 minutes	Day 11
	<input type="checkbox"/> Trebuchet Time	45 minutes	Day 12
ACTIVITY 6: LAUNCHING INTO THE FUTURE Use any or all of these fun extensions to keep the learning going. Time required: 30+ min	<input type="checkbox"/> Launch Into Reading	30 minutes	Day 13
	<input type="checkbox"/> Design a Fort	45 minutes	Day 14
	<input type="checkbox"/> Paper Airplane Launcher	30 minutes	Day 15

Total time: 6+ hours

1

activity

EXPLODING POPSICLE STICKS

Help your student set up a popsicle stick chain and watch it launch gummy bears!

POPSICLE STICK CHAIN REACTION



WARNING: WARNING! CHOKING HAZARD - Small parts. Not for children under 3 years. WARNING! DO NOT EAT OR DRINK anything in this kit.

PREPARATION AND SUPERVISION

- You will need to help your student build their popsicle stick chain.
- While there is no specific color order that the chain needs to be built in, you can use this time to work on pattern-making and recognition.

MULTIPLE AGES AND ABILITIES:

You can use this activity to assist your student in developing or increasing their color recognition by asking them to use a specific color of popsicle stick for each piece.

If you are working with older students, you can encourage them to assist a younger student in building the chain. This can assist in increasing cooperation and communication skills.

REFLECT

? Question 1: What happened when you released the popsicle sticks?

Answer: The popsicle sticks popped up and fell into a pile.

How to Help: You may want to repeat the experiment a couple of times or film it so that students can monitor the popsicle sticks well.

? Question 2: What direction did the gummy bears move in?

Answer: The gummy bears moved up and fell back into the pile like the popsicle sticks.

How to Help:

• Like with Question 1, you may want to repeat the experiment multiple times or film it for students.

• You may also want to repeat the experiment and put the gummy bears in differing locations so students can see how the different locations may alter the movement of the gummy bears. Hint: The movement will mostly be up and down, with a slight movement to the side.

? Question 3: What are two questions you have about the exploding popsicle sticks?

Answer: Answers will vary.

How to Help: Encourage students to think about what they saw and what they didn't understand yet.



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Instructions	IN-SCCOHMYT
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