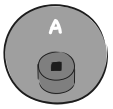
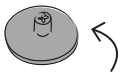
Name(s): _____ Date: _____

Critter Jitter Experiment

Part 1: Pop out the bunny piece from the paper characters sheet.

Place the bunny on top of a dowel. Use the table to test different cams, sliders, and spinners on your automaton. Write down what you see and figure out how to make your bunny hop!

Cam	**Spinner or Slider**	**Make a prediction.** What motion do you think the bunny will make?	**Test and observe.** What did the motion look like?
 A	Make sure it's around the cam. 	I think the bunny will . . .	The bunny looked like . . .
 B	 Make sure it's off-center.		
Draw or write what else you try here!			

Which pieces made the best hopping motion for the bunny? Circle below.

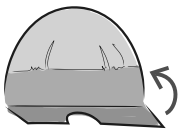
Cam: A B C D E F Slider Spinner

Part 2: Pop out the groundhog and hill pieces from the paper characters sheet.

1

Stick the groundhog on top of a dowel.

2



Fold the tab on the hill.

3

Use tape to stick the hill in front of the groundhog.

4

Your groundhog is ready to peek over the hill!

You want your groundhog to **slowly poke** its head over the hill, then **quickly drop down**. Which combination do you think will create that motion? Circle below.

Cam:	A	B	C	D	E	F		Slider	Spinner

Now test your prediction! Put the cam and slider or spinner you chose on the automaton. Turn the crank and see how the groundhog moves. Was your prediction right? If not, why?