STRAW WORM

STUDENT SHEET

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SCAN ME

1 ASK A QUESTION

What happens when drops of water are added to a scrunched-up straw wrapper?

2 FORM A HYPOTHESIS

3 DESIGN AND PERFORM AN EXPERIMENT

INGREDIENTS

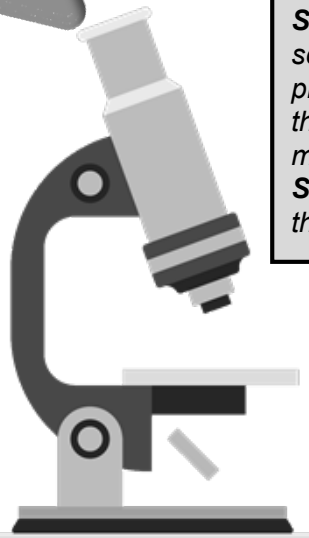
Straw with Paper Wrapper
Water

INSTRUCTIONS

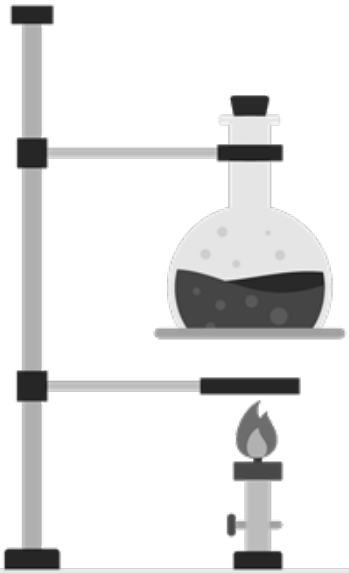
STEP 1: *Using your fingers, scrunch the wrapper entirely to the end of the straw.*
STEP 2: *Remove the scrunched-up wrapper and place it on a flat surface. Describe the scrunched-up wrapper by its observable properties. Then, using a ruler, measure the length of the scrunched-up wrapper. Record the length of the scrunched-up wrapper.*
STEP 3: *Using the straw and your finger, slowly add another drop of water to the scrunched-up wrapper and observe. Describe the scrunched-up wrapper by its observable properties. Then, using a ruler, measure the length of the scrunched-up wrapper. Record the length of the scrunched-up wrapper. Repeat this step two more times. Using these measurements, identify the scrunched-up wrapper based on its properties.*
STEP 4*: Use the collected data to create a bar graph that compares the drops of water to the length of the scrunched-up wrapper.*

4 ANALYZE THE RESULTS

5 COMMUNICATE THE RESULTS





STRAW WORM

SCIENTIFIC METHOD

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SCAN ME

WHAT IS THE SCIENTIFIC METHOD?

AS HUMANS, WE ARE NATURALLY CURIOUS. ASKING GOOD QUESTIONS IS THE CATALYST TO DISCOVERING THE BEST ANSWER. THE SCIENTIFIC METHOD, A STEP-BY-STEP PROCESS USED TO ASK AND ANSWER SCIENTIFIC QUESTIONS, IS WHAT WE USE TO GUIDE US THROUGH THIS ADVENTURE.

1 ASK A QUESTION

GOOD SCIENTIFIC QUESTIONS ARE WELL DEFINED AND MEASURABLE.

2 FORM A HYPOTHESIS

*A **HYPOTHESIS** IS AN EDUCATED GUESS, WHICH CAN BE TESTED THROUGH EXPERIMENTATION.*

3 DESIGN AND PERFORM AN EXPERIMENT

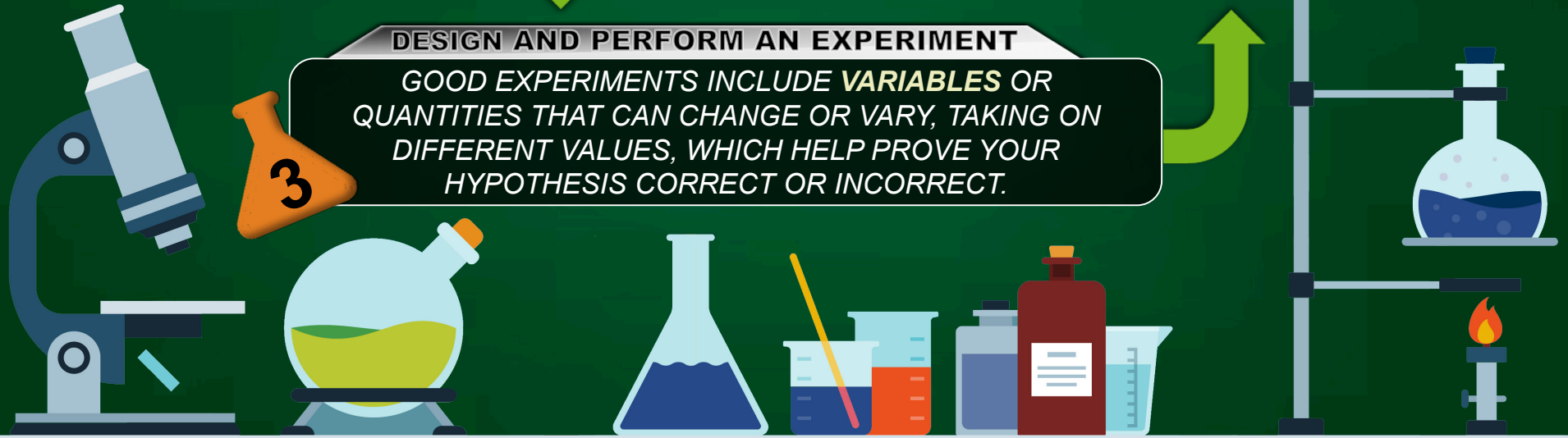
*GOOD EXPERIMENTS INCLUDE **VARIABLES** OR QUANTITIES THAT CAN CHANGE OR VARY, TAKING ON DIFFERENT VALUES, WHICH HELP PROVE YOUR HYPOTHESIS CORRECT OR INCORRECT.*

4 ANALYZE THE RESULTS

*GATHER AND ANALYZE ALL **DATA**, OR INFORMATION, WHILE PERFORMING YOUR EXPERIMENT, TO PROVE YOUR HYPOTHESIS CORRECT OR INCORRECT.*

5 COMMUNICATE THE RESULTS

CLEARLY COMMUNICATE YOUR RESULTS.



STRAW WORM

EDUCATOR SHEET

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SCAN ME

1 ASK A QUESTION

What happens when drops of water are added to a scrunched-up straw wrapper?

2 FORM A HYPOTHESIS

A student's hypothesis should be clear and state, "I think the scrunched-up straw wrapper will – when drops of water are added to the wrapper."

3 DESIGN AND PERFORM AN EXPERIMENT

INGREDIENTS

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INSTRUCTIONS

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STEP 4*: Use the collected data to create a bar graph that compares the drops of water to the length of the scrunched-up wrapper.*

4 ANALYZE THE RESULTS

Students will gather and analyze data, in this space, while performing the experiment. Look for data tables that include information from scrunched-up straw wrapper measurements, a bar graph comparing the drops of water to the length of the scrunched-up wrapper, and labeled pictures. This analysis is crucial in drawing meaningful conclusions from the experiment.

5 COMMUNICATE THE RESULTS

Students should communicate results in this space. Results may be graphed, illustrated, and/or written. They should indicate each time you added a drop of water, the paper absorbs the water, causing the scrunched-up wrapper to look like it is moving. Results should also indicate the more water you add to the wrapper, the longer the wrapper grows.