



**SUMMER
BOREDOM
BUSTER
CHALLENGE**

EXPLORE

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EXPLORE THE BACKYARD WITH THESE CREATIVE STEAM ACTIVITIES.

DID YOU KNOW?

- Not all lady bugs are ladies! Both male and females are called lady bugs.
- An average size tree has enough wood to make 170,000 pencils.

FUN FACTS

HOW DO YOU GET A BABY ROCK TO SLEEP?

YOU ROCK IT.

STEAM FUNNIES

STEAM SNACK

CHOCOLATE ROCKS

INGREDIENTS

- Chocolate chips
- Aluminum foil
- Microwave safe bowl
- Rice Krispies, nuts, or other mix-ins

RECIPE

1. Place chocolate chips in a microwave safe bowl. Heat on medium power for 30 second intervals, stirring in between, until melted.
2. Cut a 6" square piece of aluminum foil and shape into a bowl shape.
3. Carefully pour melted chocolate into aluminum foil bowl to make an igneous rock. For sedimentary rocks, add a mix-in. Refrigerate for 1 hour or until hardened. For metamorphic rocks, repeat with another layer of a chocolate.

ROCK HUNT

QUICK STEAM



WHAT'S THE STEAM BEHIND IT?

There are three types of rocks, igneous, metamorphic, and sedimentary. What type of rock do you think you have in your back yard? Go on a hunt and find out!

IGNEOUS ROCKS are made from magma from the earth's core or other rocks that have melted, crystalized, cooled, and hardened.

SEDIMENTARY ROCKS are made up of sediment and small pieces of rock that have been broken apart by weathering or erosion. The rocks form when the sediment undergoes significant pressure, pushing the pieces together.

METAMORPHIC ROCKS are igneous or sedimentary rocks (and sometimes other metamorphic rocks, too) that have been exposed to a combination of heat, pressure, and mineral-rich fluids and the rock changes form.

SUPPLIES:

- Rocks
- Magnifying glass

INSTRUCTIONS:

1. Gather rocks in your yard or in the park.
2. Observe what they look like and inspect closely with the magnifying glass.
 - Can you see small bits of other types of rock? This is likely a sedimentary rock.
 - Is the rock more uniform? This may be an igneous rock.
 - Do you see stripes of different types of rock in bands? This may be a metamorphic rock.



NATURE WEAVING



DIFFICULTY: ●●●●

TIME: 30 MINUTES

SUPPLIES:

- 2 sticks, approximately 1 foot long each
- String
- Scissors
- Assorted grasses, flowers, and leaves
- Cardboard
- Masking tape

WHAT'S THE STEAM BEHIND IT?

Weaving is an ancient art form that continues to be done today for both display and function. To weave, two different directions of fibers (or in this case plants) are interspersed at right angles. The warp of the loom are the strings that go vertically and are attached to the sticks. The weft are the fibers woven horizontally.

In this activity, you'll build technology (a tool... the loom itself...), and then weave your own creation that is made completely unique with nature. Since every leaf or flower is different from another one picked from the plant, this activity can be repeated over again to get a completely different art work.

INSTRUCTIONS: EXPLORE OUTSIDE FOR PARTS

1. Head outside and search for the following items:
 - 2 sticks, approximately 1 foot long each and 1/2" in diameter
 - Long blades of grass
 - Leaves
 - Flowers

INSTRUCTIONS: MAKE THE LOOM

1. Cut 8 x 1 foot long pieces of string.
2. Create the loom warp by tying the pieces of string to one stick, spacing the string evenly across the stick. Tape the stick to the piece of cardboard, making sure the tape only attaches the stick, not the strings to the cardboard.
3. Now tie the strings to the other stick, pulling the string taut and striving to make them the same length..
4. Tape the second stick to the cardboard as well.

INSTRUCTIONS: WEAVE

1. Now it's time to weave! Feed pieces of grass, leaves, and flowers through the strings. Alternate above and below the strings to hold the pieces in place.

HOW TO ADJUST FOR DIFFERENT AGES

Building the loom may be challenging for younger hands. Have older kids help build the loom for the little kids to weave on.

