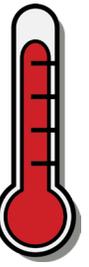


COLD BLOODED QUEST



IN THIS ACTIVITY, STUDENTS WILL DISCOVER WHAT IT'S LIKE TO BE ECTOTHERMIC, OR "COLD BLOODED".

Materials: Data Sheet, Thermometer

Time: 20 Minutes

YOU MAY HAVE HEARD THAT REPTILES AND AMPHIBIANS ARE ECTOTHERMIC, OR "COLD BLOODED" BUT THIS DOESN'T MEAN THAT THEY LITERALLY HAVE ICE RUNNING THROUGH THEIR VEINS!

Being "Cold Blooded" just means that an animal can't create its own body heat, and depends on the environment around it to regulate its body temperature. For example, a fish swimming in 60 degree water will have a body temperature of 60 degrees. Reptiles and Amphibians have a body temperature range that they must stay within in order to survive, and different species have different temperature ranges they can tolerate.

In this activity, students will look at ideal body temperature ranges of common Reptiles and Amphibians and try to find places where each animal would be at a comfortable temperature. In their habitat, Reptiles and Amphibians can live under rocks and fallen logs, underwater, in the dirt, or on the ground, rocks and trees. Find a habitat that has multiple different features, such as rocks, grass, trees, bushes, or water. Explore the temperatures of each of these features using a thermometer. Don't be afraid to stick your thermometer in the dirt, look in the shade, or find a sunny rock!

Explore the habitat and search for features that are within the ideal temperature range for each animal below. Then, draw or explain each feature you found that has the ideal temperature for each animal.

Sometimes, Reptiles and Amphibians might "bask" in temperatures above their ideal temperature and then move to places of lower temperature to cool down periodically throughout the day. Can you find good places for our animals to bask and cool down? Write down some of your temperature observations and plan out where an animal would have to move to stay within its temperature range. It takes a lot of work to keep comfortable!

THINK ABOUT IT...

How do you think a reptile's day might be different from ours?

What are the advantages and disadvantages to being Ectothermic?

How do humans stay cool in the summer heat?

Where do you think Reptiles and Amphibians go in the Winter?

DATE:

TIME:

LOCATION:

CURRENT AIR TEMPERATURE:

CURRENT WEATHER CONDITIONS:

ANIMAL

TEMPERATURE

FEATURE

DRAW OR EXPLAIN

GARTER SNAKE



IDEAL TEMPERATURE RANGE:

72-86 °F

RECORDED TEMPERATURE:

°F

BOX TURTLE



IDEAL TEMPERATURE RANGE:

72-79 °F

RECORDED TEMPERATURE:

°F

GREEN FROG



IDEAL TEMPERATURE RANGE:

65-72 °F

RECORDED TEMPERATURE:

°F

SPOTTED SALAMANDER



IDEAL TEMPERATURE RANGE:

50-65 °F

RECORDED TEMPERATURE:

°F

Tip: Make sure your thermometer is touching each feature you want to measure.
Reptiles and Amphibians can't hover in the air, and neither should your thermometer!
Hold the thermometer on each feature for at least 30 seconds to get an accurate reading.