

Sample Assessment Tasks for 1-LS1-1

1-LS-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.* [Clarification Statement: Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structures by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills; and, detecting intruders by mimicking eyes and ears.]
---------------	---

Overarching Question for the Unit

What are some ways plants and animals meet their needs so that they can survive and grow?

Elements of the DCIs:

- All organisms have external parts.
- Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air.
- Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.

Science and Engineering Practices

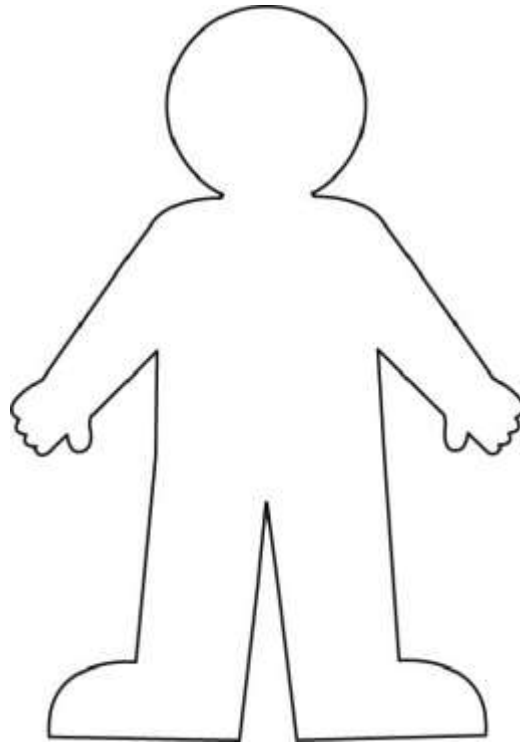
Crosscutting Concepts:

Sample Assessment Tasks for 1-LS1-1

Task 1:

On large sheets of paper, have students trace each other's body. Ask them to draw and past labels of the following parts.

Eyes – to see
Ears – to hear
Nose – to smell
Mouth – to eat and drink
Hands – to hold (grasp)
Feet – to move from place to place
Legs – to move from place to place

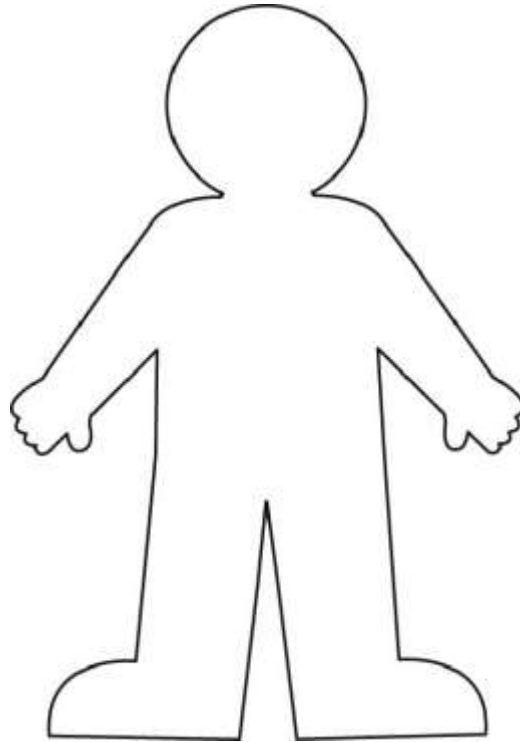


Sample Assessment Tasks for 1-LS1-1

Task 2:

Ask them to label the following parts.

I am used to find food and water
I am used to take in air
I am used to take in food and water
I am used to listen for danger
I am used to look for danger
I am used to move from place to place



Sample Assessment Tasks for 1-LS1-1

Task 3

Project the images, one at a time, onto the wall so that all of the students can see them clearly.

Squirrel



Dog



Fish



Bird

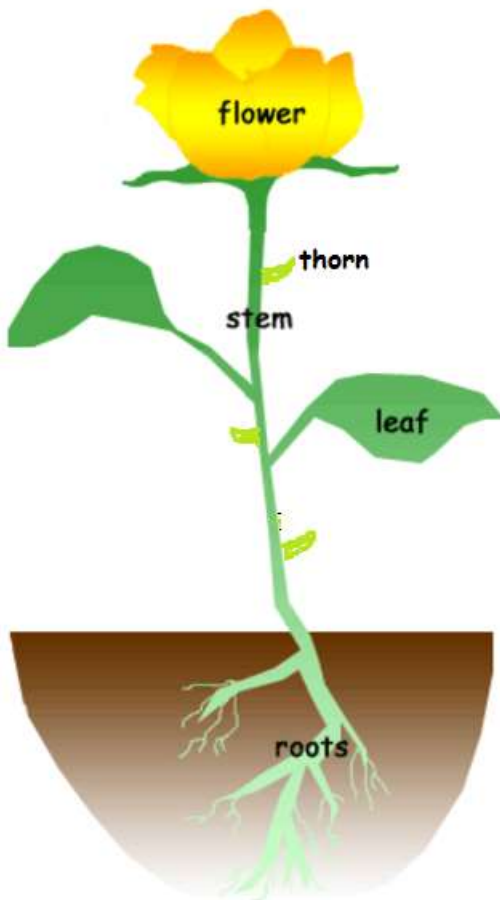


Randomly select students to stand beside the images and identify the following:

- Is used to find food and water
- Is used to take in air
- Is used to take in food and water
- Is used to listen for danger
- Is used to look for danger
- Is used to move from place to place

Sample Assessment Tasks for 1-LS1-1

TASK 4



Randomly select students to stand beside the images and identify the following:

- Is used to bring in water
- Is used to bring in air
- Is used to hold the plant up
- Is used to collect the Sun's energy
- Is used to attract insects
- Is used to protect the plant



Sample Assessment Tasks for 1-LS1-1

TASK 5

You are an engineer who works in a company that specializes in using plants and animals to inspire the designs of solutions to difficult problems. Engineers do not work alone, they work with scientists and builders to solve problems.

1. Pick a problem that you want to solve. *Give groups (3 kids) a choice of which challenge that they want to solve.*

✓ Design clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and/or animal scales.	✓ Design a product that can help someone walk across a balance beam by mimicking animal tails and roots on plants.
✓ Design a low cost way to detect an intruders by mimicking eyes and ears.	✓ Design clothing to keep from being smooshed on a bus by mimicking thorns on branches and animal quills.

The object must:

1. Solve the problem that it is intended to.
 2. Not cost any money to build or make.
 3. Look good.
 4. Be a new invention or be an improvement of something that exists.
2. Make a poster with pictures of your plants or animals.
 3. Use the stuff that your teacher gave you to make a model of your solution and be ready to explain how it works and is like the plants and animals on your poster.
 4. Test your solution and find out if it works and meets the design criteria.
 5. Based on your test, make changes to your model so that it does a better job.