

4th Grade Science Checklist

From Molecules to Organisms-Structures to Processes

- 4-LS1-1: I can explain how the internal and external structures of plants help them survive, grow, act in certain ways, and reproduce. I can explain how the internal and external structures of animals help them survive, grow, act in certain ways, and reproduce.
- 4-LS1-2: I can use a model to tell you about the ways that animals receive different types of information through their senses. I can use a model to show that animals use their brain to process information. I can use a model to show that animals respond to information in different ways.

Earth's Place in the Universe

- 4-ESS1-1: I can talk about changes in the Earth's landscape over time using evidence found in rock formations and fossils in rock layers.

Earth's Systems

- 4-ESS2-1: I can discuss the ways that water, ice, wind, or plant life can change the Earth's surface. I can make observations and measurements that show weather and/or erosion are taking place.
- 4-ESS2-2: I can use information found on maps to discover patterns on Earth's surface.

Earth and Human Activity

- 4-ESS3-1: I can describe how energy and fuel are created by natural resources. I can give examples of how using energy and fuel can affect the environment.
- 4-ESS3-2: I can come up with solutions to problems that some natural Earth processes, like earthquakes, volcanoes, or floods, can cause for humans.

Energy

- 4-PS3-1: I can explain how the speed of an object is related to the energy of that object.
- 4-PS3-2: I can explain how energy can be transferred by sound, light, heat, and electricity.
- 4-PS3-3: I can ask and answer questions about the energy transfers that occur when two objects crash.
- 4-PS3-4: I can use what I know about energy to create devices that convert energy from one form to another.

Waves and their applications in technologies for Information Transfer

- 4-PS4-1: I can create a model of waves to show patterns in amplitude and wavelength. I can create a model of waves to show that waves can cause objects to move.
- 4-PS4-2: I can create a model to show that light reflecting from an object and entering the eye allows the object to be seen.
- 4-PS4-3: I can compare different ways that patterns are used to transfer information.

Engineering Design

- 3-5-ETS1-1: I can find a design that needs to be fixed. I can define what a successful design would involve. I can plan the amount of materials, time, or money that it would take to complete the fix.
- 3-5-ETS1-2: I can evaluate possible solutions to a problem when presented with more than one solution. I can discuss which solution would work best and tell you why.

- 3-5-ETS1-3: I can test a model or prototype so that I can figure out what improvements are needed.