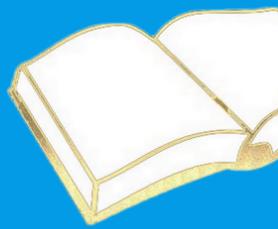


2020 - 2021

1ST GRADE SCIENCE STUDY GUIDE



CGA WEEKLY SCIENCE LESSONS

Participate in the weekly Canyon Grove Family Science lessons. These video based lessons are fun and are a great way to learn science!

You can also rewatch the lessons for review. For 1st grade standard review you should watch lessons 1, 10, 12-14 & 17-18.

PRACTICE NOTICING AND DESCRIBING DETAILS

Noticing (observation) and describing details is an essential part of Science. Choose any object and pretend you've never seen it before. Describe the details and things about it that you like or don't like, that make you curious, or that make it beautiful or not beautiful. It's easy to do this with art when you try to draw a still life or photograph.

ASK QUESTIONS IN FRONT OF YOUR CHILDREN AND RESEARCH WITH THEM ANSWERS TO QUESTIONS THAT THEY HAVE:

Be curious about the world around you and take time to research things with your children that they have questions about...

LEARN ABOUT SCIENTISTS AND WHAT MOTIVATED THEIR DISCOVERIES

Take time to learn about specific scientists. What question or problem were they trying to solve? What led to their discoveries? What were their lives like? How did they think about the world?

SCIENCE IS A WAY OF THINKING



PRACTICE LOOKING AT AND INTERPRETING DATA

This is a critical skill in science, technology and engineering as well as just living in our modern world.

This can occur very naturally and easily by using a topic that is important to your child and start researching it. Are they thinking about starting a business or getting a pet or making a recipe? Find data about your topic with them that will be helpful. Some examples would be: life expectancy of certain breeds of animals, most used recipes, average prices for certain products or services. The list is endless. If you need more ideas, [HERE](#) are a couple of activities where you can practice using data.

OBSERVE NATURAL PHENOMENA

Take as many opportunities as possible to observe natural phenomena.

You don't have to focus on explaining the why to your student. Just focus on noticing details and asking questions. Let them gather conclusions about why they think it behaves the way it does and enjoy the experience. You can do it through media or out in nature or at a museum. Natural phenomena can be exotic like watching a geyser at Yellowstone or an everyday occurrence like what happens to the garbage that we collect every day. Here is a [fun website](#) with everyday mysteries

TAKE A LOOK AT THE TOPICS THAT WERE COVERED THIS YEAR IN 1ST GRADE

Read through the topics on the next page to see all the interesting ideas we talk about in 1st grade.



APPLY THE PRICIPLES ABOVE TO EXPLORE THE TOPICS BELOW

As you look through each topic, which activities above could you apply to each of these topics?

Visit our website for more information about our programs

www.canyongrove.com



GRADE LEVEL TOPICS

SEASONS AND SPACE PATTERNS



- The movement of the Sun, Moon, and stars to describe predictable patterns. Examples could include how the Sun and Moon appear to rise in one part of the sky, move across the sky, and set; or how stars are visible at night but not during the day.
- Design a device that measures the varying patterns of daylight.

SEASONS AND SPACE PATTERNS

- The patterns observed at different times of the year to relate the amount of daylight to the time of year. Emphasize the variation in daylight patterns at different times of the day and different times of the year. Examples could include varying locations and regions throughout the state, country, and world.



THE NEEDS OF LIVING THINGS AND THEIR OFFSPRING



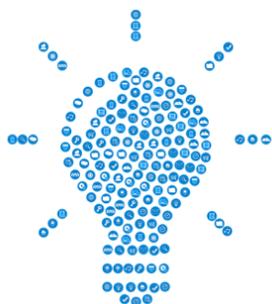
- The effect of sunlight and water on plant growth.
- External features of living things that survive in different locations. Examples could include that plants living in dry areas are more likely to have thick outer coatings that hold in water, animals living in cold locations have longer and thicker fur, or most desert animals are awake at night.

THE NEEDS OF LIVING THINGS AND THEIR OFFSPRING

- Plants and nonhuman animals that are alike, but not exactly like, their parents. An example could include that most carrots are orange and shaped like a cone but may be different sizes or have differing tastes.
- Behaviors of parents and offspring which help offspring to survive.



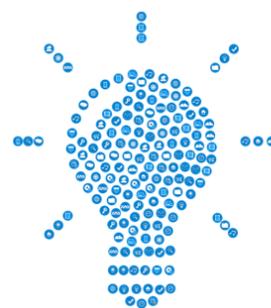
LIGHT AND SOUND



- The cause and effect relationship between sound and vibrating matter. Emphasize that vibrating matter can make sound and that sound can make matter vibrate.
- The effect of light on objects. Emphasize that objects can be seen when light is available to illuminate them or if they give off their own light.

LIGHT AND SOUND

- The effect of materials in the path of a beam of light. Emphasize that light can travel through some materials, can be reflected off some materials, and some materials block light causing shadows. Examples of materials could include clear plastic, wax paper, cardboard, or a mirror.
- Design a device in which the structure of the device uses light or sound to solve the problem of communicating over a distance.



WATCH FOR MORE INFORMATION ABOUT THE CANYON GROVE SCIENCE BEE

SOMEWHERE, SOMETHING INCREDIBLE IS WAITING TO BE KNOWN.

Carl Sagan