Canyon Grove Academy

2020-2021

4TH 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 4th grade standard review you should watch lessons 1, 9, 15, 17-20 & 24.

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 4TH GRADE

Read through the topics on the next page to see all the interesting ideas we talk about in 4th 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

4TH GRADE

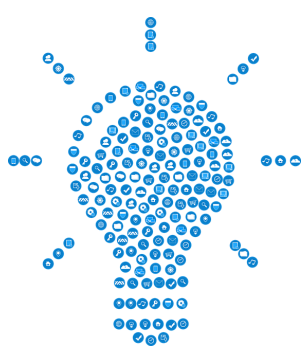
GRADE LEVEL TOPICS

ORGANISMS FUNCTIONING IN THIER ENVIRONMENT

- Body structure of plants and animals that help them survive in the environment
- Senses, perceptions and responses of animals in the environment
- Ancient organisms and fossils
- Patterns in rock layers and fossils that show change in environment over time

ENERGY TRANSFER

- Speed and energy relationship (A fast moving ball hits you harder)
- Energy and collision (what happens to the energy?)
- Energy comes from sound, light, heat and electrical currents
- Energy conversion (like solar ovens and alarm systems)

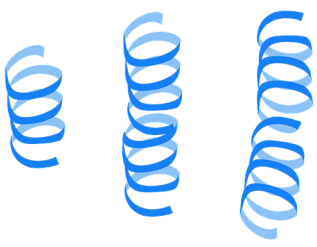


WAVE PATTERNS

- Patterns of waves (amplitude and wavelength)
- Visible light
- Using waves to transfer information (radio, laser, telescopes)

OBSERVABLE PATTERNS IN THE SKY

- Relative distance from earth (the sun looks brighter than other stars because it is closer to us)
- Patterns that show rotation and orbits (day and night, seasons)



SCIENCE IS FUN

Learning about natural phenomena and what makes the world tick around us never gets boring. Tap into students natural curiosity and you can go on an exciting science journey every day.

QUESTIONS ARE THE GOAL

In learning science the goal is to learn to ask questions. Asking good questions is the basis for every discovery.

WATCH FOR MORE INFORMATION ABOUT THE CANYON GROVE SCIENCE BEE

SOMEWHERE, SOMETHING INCREDIBLE IS WAITING TO BE KNOWN.

Carl Sagan