

Cashell Elementary School

Designing and Conducting an Experiment

Weeks Two and Three: March 6 – March 19

Was Your Cashell Scientists Successful Last Week?

Did your student check out the library, media center or internet to help them with background on their topic? Did they ask for help from family or friends? Students can use any available resource to help them learn about their topic.

Week Two and Three

Students should ask an adult to review their experimental procedure and list of materials. They should write everything down in their notebooks. It is okay if an adult helps them do the writing.

Experimental Procedure

- Students doing an experiment or demonstration need to develop an experimental procedure this week. They should plan what they will do step by step. Students should write this down in their notebook.
- Students working on an invention should develop a plan for what it will take to build their invention. Students should write this down in their notebook.
- Students working on a research project should skip this step.

Materials List

- Students should take a list of things they need to do an experiment or demonstration. Students should write this down in their notebook. Parents should then help the students collect all of the materials they need for their experiment or demonstration.
- Students working on a research project should skip this step.

Data

- Students should now do the experiment or demonstration. They should write down everything that happens and take lots of pictures and measurements. They should do the experiment or demonstration three times to prove that the results are not just an accident. Write down the results from all three trials in the notebook.
- Students that are conducting a survey or testing a behavior need to ensure they have enough test subjects or observations to make their data is relevant and provide a trend. Students should write the results down in their notebook.

Note

Don't let students be upset if their experiment or demonstration doesn't work the first time. Remind them that scientist usually repeat their experiment many times. They may need to change their procedure if it doesn't work. Encourage the student to talk to an adult about their efforts and discuss how to improve the experiment.

Next Week

Next week we will focus recording results, writing conclusions and working on our poster displays.

Questions

Contact Elizabeth McAndrew-Benavides at emb@nei.org or 202-528-9271.