

Parent Guide to 2nd Grade Science

Welcome parents! Here is your guide to science in your child's class this year.

Remember the most important science resource is your child's teacher. Contact them to find out more!

How Is Science Taught in the School District of Philadelphia Today?

You may find that science is taught very differently from the way that you learned it in school! Pennsylvania's new science standards and the School District of Philadelphia's new K-12 Science Instructional Guide put **student ideas about science** at the center of the classroom. This approach allows students to be scientists --instead of just **learning about** science, they are **figuring out** science!

For example...

Old way: Students memorize facts about the structure and properties of matter.

New way: Students use water and butter to investigate how some changes caused by heating or cooling can be reversed while others cannot.

Old way: Students copy pictures of the sun that demonstrate where it is at different times of the day. **New way:** Students support claims about the movement of the sun by identifying an outdoor object that receives direct sunlight, then tracing an outline of its shadow at three different times during the day

As the science standards are implemented in schools and districts, they will enable students to:

- Develop a deeper understanding of science beyond memorizing facts, and
- Experience similar scientific and engineering practices as those used by professionals in the field.

What Will Your Child Be Figuring Out This Year?

Some of the big ideas students are figuring out in 2nd Grade include:

- How does land change and what are some things that cause it to change?
- How are materials similar and different from one another, and how do the properties of the materials relate to their use?
- What do plants need to grow?
- How many types of living things live in a place?

How Can I Help My Child Learn and Grow in Science?

Studies show that family involvement is one of the biggest predictors of success in school. That's why parental involvement is so important. Seek opportunities to explore science at home and in the community with your child. Encourage them to keep asking questions, just like scientists. Let them know you don't have all the answers, and together try to find them. We also encourage you to get involved at your child's school and connect with teachers to learn more about changes in science instruction as they occur and help inspire children by exploring careers in STEM fields.

Also, check out the National Science Teaching Association's parent page: https://www.nsta.org/science-resources-parents

You'll find tips to support science learning at home, links to student competitions, recommendations for science trade books, and much more.