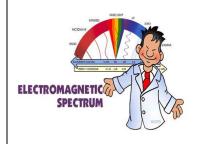
SCIENCE, TECHNOLOGY, ENGINEERING & MATH



X-RAYS (K-2) The SCIENCE of X-RAYS:

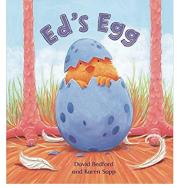
Light moves in waves. This is the **electromagnetic spectrum**.



We cannot see x-rays, but they can pass through some solid objects.







<u>READ</u>:

Ed's Eqq, by David Bedford and Karen Sapp, will take you on an adventure with a little chick who isn't ready to leave the safety of his shell just yet. Don't have the book at home? Enjoy the book online with a fun read aloud.

ACTIVITY: EGG X-RAY

Materials: raw egg, white vinegar, clear glass or jar 1. Carefully place an egg in the glass jar.

- 2. Fill the jar with white vinegar (enough to completely cover the egg).
- 3. Wait 24 hours, until most of the egg shell has dissolved away. Pour the liquid out and carefully catch the egg.
- 4. Wash the egg under running water, rubbing the remaining bits of shell off with your fingers.

TIP: If the shell isn't coming off easily, return it to the jar with fresh vinegar for another day.

The egg is still held together and you can even see the yolk. <u>Wash your hands when finished</u>. **What is happening?** Egg shells are made of calcium, the same material found in seashells. The vinegar is a weak acid. These items react with each other and the results are calcium acetate (white powder), water, bubbles, and a strange looking egg.

EXPLORE: Add food coloring to the vinegar to change the color of your egg. To make a 'bouncy egg', let the egg soak for several days. If you bounce the egg too hard – it will break!

For step-by-step instructions, watch the video at: Egg X-Ray STEM Activity

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org

