# STEM Kit! Compliments of Fairport Robotics!

This month's kit: Beans in a Bag!





In this kit, you will grow bean sprouts using the enclosed beans and other supplies!

Materials: Beans, bag, paper towels, water

<u>Make a hypothesis (a guess about what will happen)</u>: How much time do you think it will take your beans to grow roots? Leaves? Do you think all three kinds of beans will sprout at the same time?

# **Directions:**

 Make your paper towel damp. That means to get it wet with water, but not dripping wet! Run it under your sink, then wring some of the water out by twisting the towel. Place it in your bag, then spread your beans out at the bottom of the bag on top of the paper towel. Make them about 1 inch apart so they don't tangle when they grow.



 Place your bag in a warm, sunny spot. If you'd like, tape it to your window. Now let the magic happen! Feel the paper towel every day to make sure it is still damp. If it's not, pour a little more water inside. Observe how your sprout changes.



After 1-3 days, you should see your beans starting to sprout their roots!



The next stages of your beans! If they sprout leaves, they are ready to be planted!

- 3. You might see some of your beans **germinate** (begin to grow) in as little as four days. Other beans might take as long as two weeks!
- 4. When your beans are ready to plant, think about what plants need to grow. Your beans will need water and sunlight to grow. They take energy from sunlight in something fancy called **photosynthesis**. They also need to be planted with their leaves above the dirt and their roots inside the dirt. Ask your parents' permission if you want to find them a new home in a pot or outside!

#### How does this relate to STEM?

Botany is the study of plants. If you liked this kit, maybe you could be a botanist when you grow up! Botanists can be Foresters or Environmental Engineers, or they can even work in Biotechnology! While Fairport Robotics loves robots, we think the natural world is also unbeLEAFably cool!

### Other fun stuff!-Did you know that Earth Day is April 22nd?

## What is Earth Day and why do we celebrate it?

Earth Day is a yearly celebration. We celebrate Earth, raise awareness about how important it is to take care of Earth, and celebrate the people who help us do that. Earth is the only home we have

If you enjoyed this STEM activity and love to be creative, consider joining a Fairport FIRST Lego League team or Fairport Robotics Team 578, Red Raider Robotics! For more information, email us at <u>info@fairportrobotics.org</u>!



Stay tuned for a new STEM activity next month!