

Bee the Inventor

Grade level: K-1

Summary of lesson: *Bee the Inventor* is a 10-page STEAM activity book that teaches young kids about invention through the role leaf cutter bees play in our environment. Kids learn how to build a bee house prototype for bees Shagun and Dwij.

Time/Duration: Five 30-min classes

Learning Principles:

- Learn about the invention process; learn about leaf cutter bees and how they are important to the environment
- Use a ruler to make sure the tubes in the prototype are the right size
- Gain fine motor skills by sketching a bee house and using various craft materials to build the house
- Write about the bees, learn invention-related vocabulary and present to the class

Subject areas/Standards:

K-LS1-1, K-ESS3-3, 1-LS-1, K-2ETS1-1, K-2-ETS1-2, CCSS.ELA-LITERACY.RI.K.4/RI.1.14, CCSS.ELA-LITERACY.SL.K.1/SL.1.1, CCSS.MATH.CONTENT.K.MD.A.2, CCSS.MATH.CONTENT.1.MD.A.1

Breakdown of lessons:

Meeting 1: Learn about leaf cutter bees and their importance in the environment; research the problems they face by humans and animals

Meeting 2: Brainstorm solutions to the problems the bees face and sketch a design for their home

Meeting 3: Build the home

Meeting 4: Finish building the home and create a poster with sketches and thoughts to present

Meeting 5: Present the homes and posters to the class; option to extend the same type of lessons with other insects or animals

Materials:

- Assorted office materials such as:
 - o Paper
 - o Index cards

- o Paper and binder clips
 - o Rubber bands
- Recycled materials such as:
 - o Paper towel and toilet paper tubes
 - o Folded thin cardboard (i.e., cereal boxes)
 - o Egg cartons
 - o Plastic or cardboard milk/juice containers
 - o Straws
 - o Packing materials (i.e. peanuts)
- Assorted plastic utensils
- Duct tape and masking tape
- Scissors
- Craft supplies such as felt, markers, and crayons (for decorating the house)