

# HBCSD TECHNOLOGY LESSON PLAN

## 2nd GRADE (Lesson 2)

**Grade Level - 2**

**Lesson Title - Engineering a Tool to Mimic Pollination**

### Standards

[NGSS 2-LS2-2](#). Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

[NGSS 2-LS2.A: Interdependent Relationships in Ecosystems: Plants depend on animals for pollination or to move their seeds around.](#)

[NGSS K-2-ETS1-2](#). Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

[NGSS K-2-ETS1.B: Developing Possible Solutions Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. \(secondary\)](#)

[CCSS.ELA-Literacy.RI.2.7](#) Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

### Technology Competencies

- Identify computer parts
- Turn computer on and off correctly
- Use output devices (e.g. monitor, printer, storage device, projector)
- Use input devices (e.g. mouse, touchpad, keyboard, remote control, scanner)
- Use basic operating system features (e.g. help menus, control menus, etc.)
- Create/Use/Save files to and retrieve from network folders
- Use appropriate tools for the application (word processing, data base, spreadsheet, multimedia)
- Choose and use appropriate network printer
- Use digital-imaging technology (Kid Pix, Paint, GIMP, PhotoShop)
- Create a product (e.g. newsletter, sign, card, web page) using grade level appropriate tools (Publisher, Front Page)
- Understand and abide by District Acceptable Use Policy
- Respect ideas and material as property (e.g. plagiarism, intellectual property)

### Purpose

Draw a picture of an object that could model how pollination works in an ecosystem.

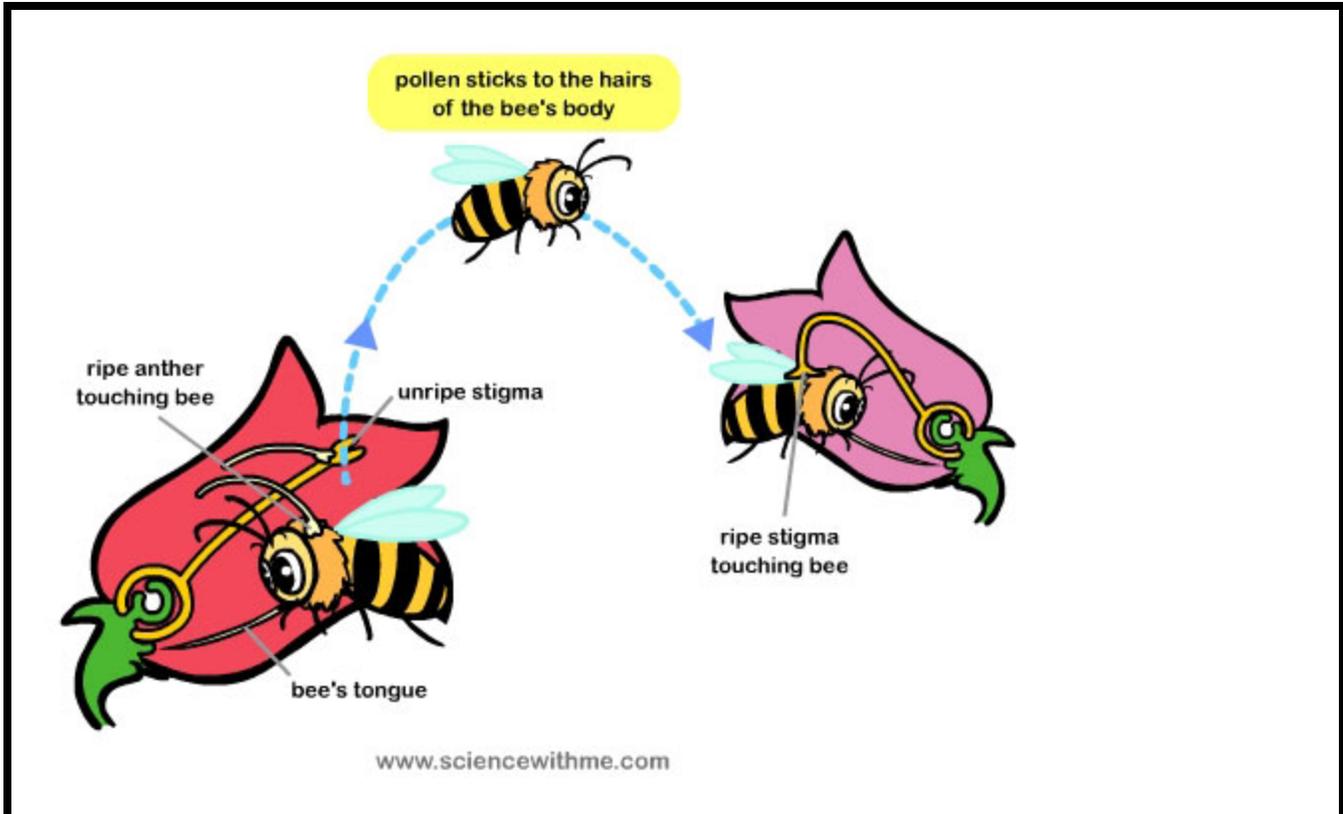
### Resources

<http://www.youtube.com/watch?v=V5yya4eIRLw>

Plant Growth & Development kit and TE

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### Supplies

- Computers with a drawing program (KidPix, TurboPix)
- Plant Growth & Development Kit, plants, bees

### Direct Instruction

1. Use kit to teach about pollination

### Guided Practice

1. Watch "Pollination Rock" to show how sometimes we create videos to model what we've learned
2. Have the students brainstorm how they can create a model of pollination from items of which they are familiar. (ie. using a pipe cleaner to represent hairy legs of the bee)
3. In groups, students will engineer a tool that models pollination. Using the drawing program, they will draw a diagram of their model labeling the objects they used in their new "tool."

### Differentiated Instruction

ELL - Provide realia with word lists to help with labeling of their design.  
GATE - They can construct their model after diagramming.

### Assessment

Have students present their new pollination models to check for understanding of pollination process.