

# Critical Thinking Skills

## Ecosystems

Skills For Critical Thinking		Reading Comprehension								Hands-On Activities
		Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	
<b>LEVEL 1</b> Knowledge	<ul style="list-style-type: none"> <li>List Details/Facts</li> <li>Recall Information</li> <li>Match Vocab to Definitions</li> <li>Define Vocabulary</li> <li>Label Diagrams</li> <li>Recognize Validity (T/F)</li> </ul>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LEVEL 2</b> Comprehension	<ul style="list-style-type: none"> <li>Demonstrate Understanding</li> <li>Explain Scientific Causation</li> <li>Rephrasing Vocab Meaning</li> <li>Describe</li> <li>Classify into Scientific Groups</li> </ul>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LEVEL 3</b> Application	<ul style="list-style-type: none"> <li>Application to Own Life</li> <li>Model Scientific Process</li> <li>Organize &amp; Classify Facts</li> <li>Utilize Alternative Research Tools</li> </ul>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LEVEL 4</b> Analysis	<ul style="list-style-type: none"> <li>Distinguish Roles/Meanings</li> <li>Make Inferences</li> <li>Draw Conclusions Based on Facts Provided</li> <li>Classify Based on Facts Researched</li> </ul>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LEVEL 5</b> Synthesis	<ul style="list-style-type: none"> <li>Compile Research Information</li> <li>Design &amp; Application</li> <li>Create &amp; Construct</li> <li>Imagine Self in Scientific Role</li> </ul>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LEVEL 6</b> Evaluation	<ul style="list-style-type: none"> <li>State &amp; Defend an Opinion</li> <li>Justify Choices for Research Topics</li> <li>Defend Selections &amp; Reasoning</li> </ul>	✓	✓	✓	✓	✓	✓	✓	✓	✓

Based on Bloom's Taxonomy



# T-Shirt Design Contest!

Write "Save Our Ecosystems!" on the line in the shirt





# The Rabbit Bean Population!



## YOU WILL NEED:

- Two colors of dried beans
- Graph paper
- Pencil or marker

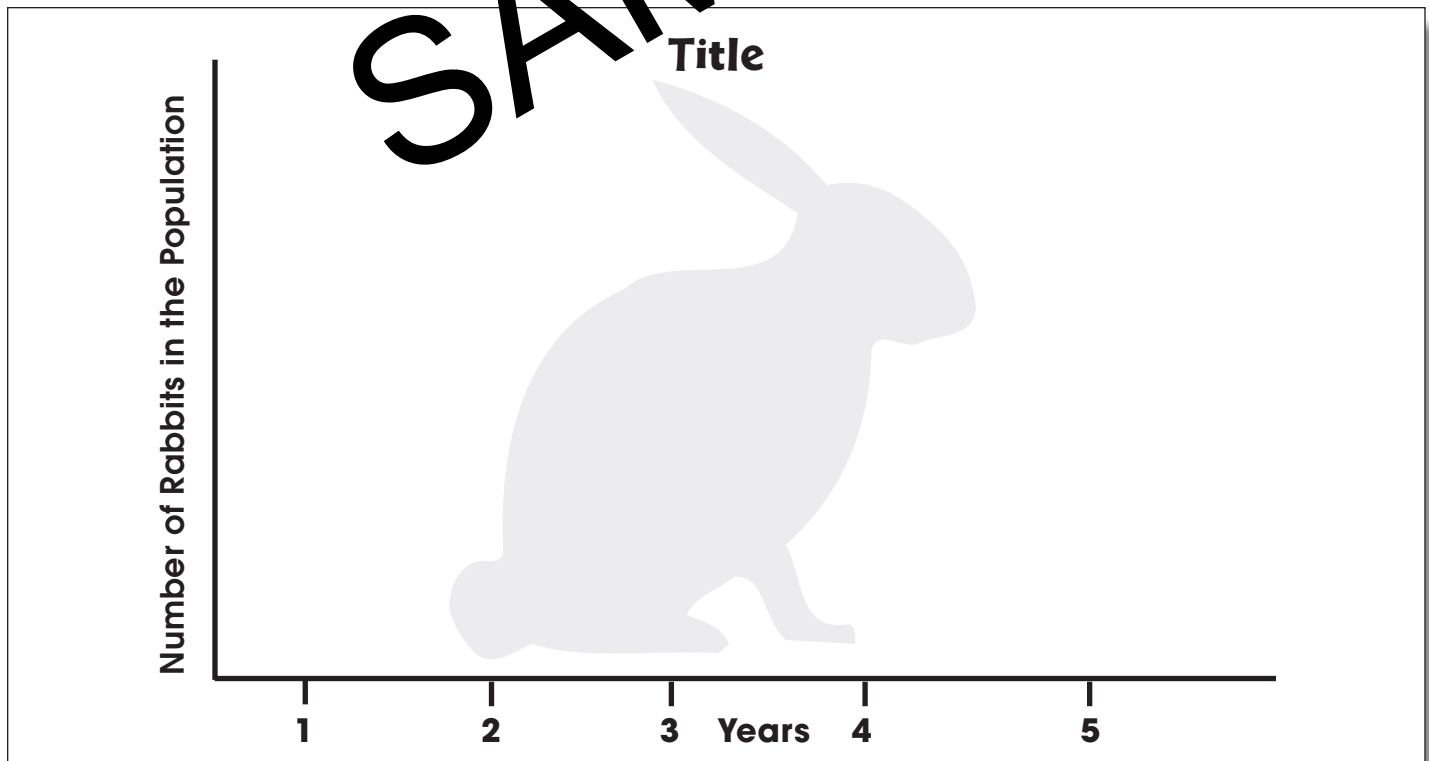
Begin with two beans. You should have two different colored beans. One bean is a **male** rabbit and the other color bean is a **female** rabbit.

You are now going to **record the rabbit population for the next five years**. You won't be spending five real years on this project, don't worry!

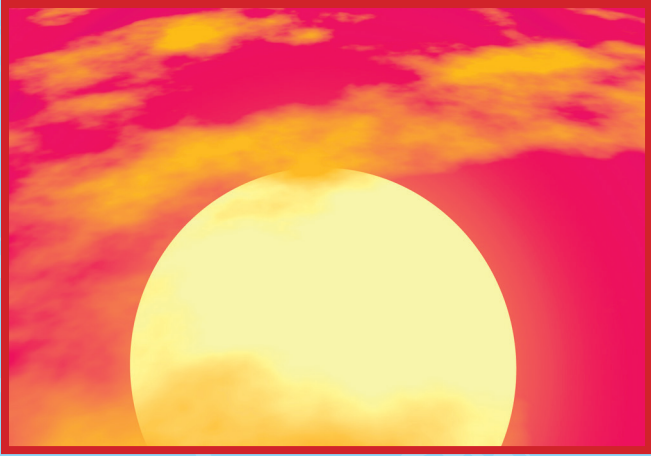
Each year, each pair of rabbits gives birth to two rabbits – one male and one female. **SET UP A GRAPH** to record how the rabbit population will grow. Each year you will add beans to your population pile. These beans will be the new rabbits that are born each year. Record the numbers on your graph paper.

How many rabbits are in the population after five years? **Remember: after the first year, there are many pairs that will give birth to two new rabbits. The population will grow quickly!**

SAMPLE



# Food Chain



Sun



Grass



Eagle



Insect



Snake



Frog

SAMPLE