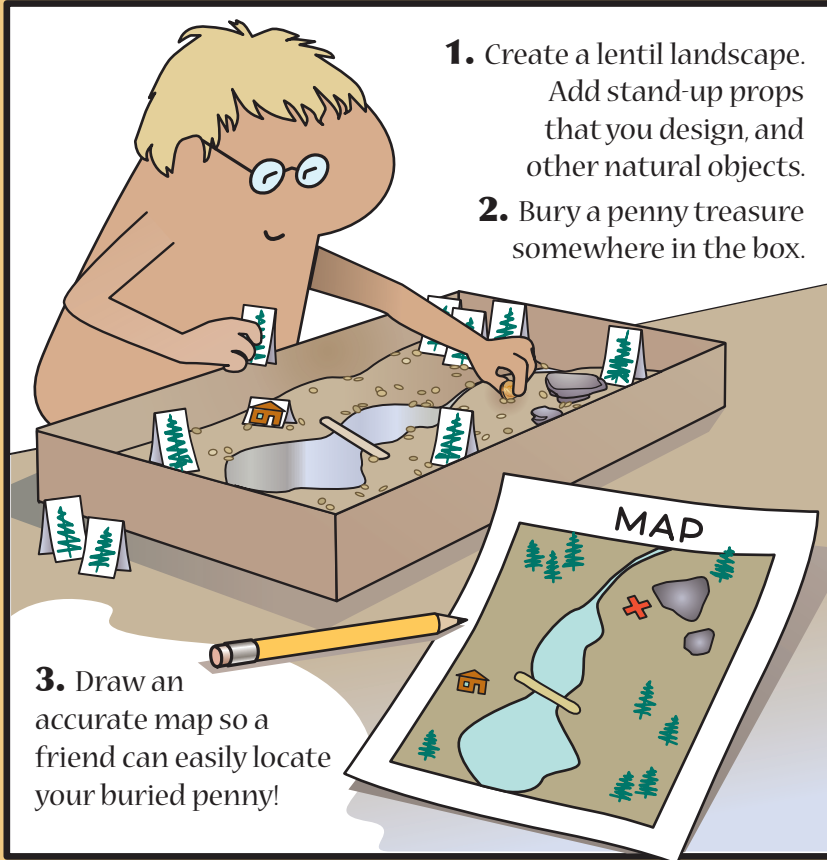


treasure map

...adapted from **LENTIL SCIENCE #71**
by TOPS Learning Systems



1. Create a lentil landscape.
Add stand-up props that you design, and other natural objects.
2. Bury a penny treasure somewhere in the box.

3. Draw an accurate map so a friend can easily locate your buried penny!

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OBJECTIVES

To create an imaginative landscape with lentils and other props. To bury a penny "treasure" within this landscape, and accurately map its location so someone else can find it.

LAB NOTES

Photocopy the lab for each student or team.

Step 1. Possible **LANDSCAPES**: islands, peninsula, coastline, river, delta, bay, lake, mountain range, volcano... **PROPS**: trees, campfire, animals, tent, cabin, hikers, a compass face with N, S, E, W coordinates... **OBJECTS**: stones, twigs, craft sticks, wood blocks, pipe cleaners, aluminum foil (water)....

Step 3. Competitive children may think the map maker somehow "wins" if the map reader can't locate the penny. Emphasize the win-win nature of this activity. A quick find indicates both an excellent map and good map-reading skills.

EVALUATION

Is the map neat and well-proportioned, with landmarks in the correct orientation? Can you rely on the map to locate the treasure?

EXTENSION

a. Write stories about special adventures that happen inside the landscape you've designed. (*Call forth the naturalist in your students by encouraging them to describe rich detail.*)

b. Instead of "x" marks the spot, challenge students to guide a treasure hunter to the penny using written directions and compass bearings. Start from a recognizable landmark, and list how many steps (inches or centimeters) a searcher must move in specific directions to reach the treasure.

MATERIALS

- A shallow box or tub (see illustration). Carry-home corrugated boxes from garden shops serve well. A seamless bottom is helpful. Sides should ideally be at least 3 inches (8 cm) high.
- Three or four pounds of lentils, or enough to fill box or tub about 2 inches (5 cm) deep.
- Paper, pencil, scissors, and colors for drawing props. Use heavy paper for stand-up strength and easy handling, or fold paper double.
- Various natural objects, and a penny.

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