

Star Search – Find your way

Equipment Needed:

Pavilion (or covered area)

2 Rolls of Duct Tape (to mark starting line and patrol spaces)

10 Pencils

10 clip boards

20 18x12x10 boxes (See Box Construction for instructions)

10 Astronomy pamphlets w/ ring to hang on rope across the start line

110 score sheets

4 stop watches

50 additional astronomy pamphlets to be put in final take home envelope

60 foot rope

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Box Construction:

Materials:

1 empty cardboard box; one that holds 8 ½ x 11 inch photocopy paper works perfect
¼ inch foam board
Aluminum foil
1 Battery operated light
Hot glue
4 Foam blocks – approximately 1 inch x 1 inch x 4 or 5 inches
Nail or other tool to punch holes in the foam board
Star patterns
Black spray paint

Instructions:

See the accompanying illustration to help with box construction.

1. Make sure the box top is in place and spray paint the outside of the box. Painting the bottom is optional.
2. When the paint is dry, make sure the box top is in place then mark and cut out a rectangle viewing hole on one end. The size should be around 1 inch tall and 5 inches wide. The top of the hole should align with the bottom of the box top.
3. Line the inside “back wall” of the box with aluminum foil – the side that is opposite from the viewing hole. Be sure the shiny side is showing. Hot glue or tape the foil so it will not shift.
4. Hot glue or sticky tape the light to the bottom of the box next to the foil. Try to center the light so the light is reflected evenly.
5. Cut the foam board to fit the box – it should be parallel to the back wall of the box. When the box top is in place, minimal light should show around the edges.
6. Hot glue foam blocks on both sides of the box to keep the foam board in place. Try to leave a little “wiggle” room so you can slide the foam board into and out of the space.
7. Remove the foam board from the box and mark the desired star pattern on one side. Punch holes in the foam board that represent the stars. Slide the foam board back into the box.
8. Place a paper copy of the star pattern in the box (lid or front wall) so you do not forget which star pattern is being used.
9. If several boxes are being made, put a number on the outside of each box (near the viewing hole) so you can keep up with which box contains the different star patterns. Make a list of the box number and star patterns.
10. Have fun playing the game.

