Can you build a fire and boil an egg in fifteen minutes?

Materials 1 match 1 pot / tin can of at least 1 pint (16 oz) capacity 1 pint (16 oz) water 1 raw egg in shell knife various dead branches, and other flammable stuff normally found in the woods in your area

Method

In a fire-safe spot, build a fire using only one match, hard-boil the egg and eat it (salt optional).

Results: Were you able to start the fire with one match? How long did it take? Did you have trouble boiling the water? Did you kill the fire safely afterwards?

Options:

1. Repeat with a butane lighter.

2. Repeat with a butane lighter that ran out of fuel (i.e. use only the spark)

- 3. Repeat with a fire steel / metal match
- 4. Repeat with a plastic Fresnel lens in the sunlight

Can you take an accurate bearing with a compass?

Material 1 compass with a rotating bezel 1 helper familiar with compasses

Method

1. Find an open area, preferably a field surrounded by trees.

2. Standing at Point A, take a bearing of an object (Point B) at least several 100 feet away and adjust the bezel accordingly.

3. Without telling your helper where Point B is, have him/her use the compass and walk toward the bearing, keeping his/her head down (so as not to see Point B).

Results

1. Did they arrive at Point B?

2. If not, was the compass bearing correct?

Options

1. Reverse the roles. Have the helper take a bearing to a new object (Point C) and adjust the bezel accordingly. Then you follow the bearing with your head down until you reach Point C. Did you reach it? Why not?

Can you match a map to reality and identify some landmarks?

Material

Map (7.5 degree USGS map preferred) of the selected area. Compass with a base plate (orienteering type)

Method

- 1. Lay map on a flat surface and identify your position on the map
- 2. Rotate map, visually aligning map features to nearby landmarks
- 3. Optionally, determine North via a compass and align the map North indicator to the compass

Results

1. Visually, can you correlate additional landmarks with those on the map? Are they at the right bearing?

2. Can you take a bearing to a landmark with the compass and verify the bearing with the map?

3. In reverse, can you take a bearing from the map to a landmark and verify it with a visual sighting with the compass?

Can you signal with a mirror and a whistle?

Material 2 whistles 2 signal mirrors

Method

Two persons required, each one has a mirror and whistle

- 1. Practice aiming a spot of sunlight at a distant target. for example, a tree at 100 feet
- 2. Stand at least several 100 feet away from each other
- 3. One signals the whistler with the mirror
- 4. Each time the whistler receives a flash, s/he blows the whistle.
- 5. After a time, reverse the roles

Result

Each person learns to flash the mirror and receives feedback

Each person uses the whistle to respond

Both verifies that a signal mirror and a whistle can attract attention at a long distance

Can you improvise a shelter quickly from trash bags?

Material

2 large plastic trash bags, lawn size or larger is better30 feet of parachute cord or equivalent15 feet of duct tape (optional)Knife

Method

Select a grassy or wooded area with trees Construct a shelter. Some options are: --- cut open the trash bags and use as a tarp --- tie the cord between trees and create an A-frame tent --- tie the cord between trees and create a tube tent --- any other shelter Lie down for 10 minutes or, better yet, take a nap

Results

If it rains, would it protect you?

If it is windy, would it survive the night?

Is it reasonably comfortable to sleep the night?