

## COLLECTING ENERGY FROM THE SUN

(Thermal Conductors)

Which colour is best for absorbing heat from the Sun?



### You will need:

- Six or eight jars with lids, or empty drinks cans
- Waterproof paint  
- various colours including black
- Thermometer
- Water
- 100cc measure



Paint the jars or cans with paint the previous day. You will need a small piece of blu-tak to plug the holes if using cans.

*(Which colour do you think will be the "best"? What does "best" mean?)*

### What to Do:

- Measure 100cc of water into each container
- If necessary, plug the hole in the top of each container with a thermometer or piece of blu-tak
- Put the containers on a bed of newspapers out in the sun

### What to Measure

- After ten minutes measure the temperature of each container of water.
- Record your results.

### What did you find out from your results?

*You should find that the container painted black absorbs energy more quickly and so heats the water to a higher temperature more quickly.*



### Think About:

- What you did to make this a FAIR test
- Why you used the newspapers
- What you would change to make the test more accurate next time