

# Experiments in the Sun - Heat

## What you need:

- Watch with second hand
- 2 thermometers
- 4 pans, 10 cm in diameter (three light coloured and one pan dark or black)
- Water
- Desk lamp

## What you need to do:

1. Place light coloured pan and a dark or black pan in a sunny place.
2. Fill both pans with exactly the same amount of water. Check that the temperature of the water in both pans is the same. After ten minutes, check the temperature of both pans.

### Record the differences

Light coloured pan temperature =

Dark coloured pan temperature =

Why did this occur?

3. Place a light coloured pan with water in it, in the sun.
4. Place another light coloured pan with the same amount of water under a shady tree.  
Check that the starting temperature of the water is the same for both pans.
5. After ten minutes, check the temperatures of the water in the pans.

**Which is warmer?**

**Why?**