





### Suggested fire experiment

1. You will need to formulate a hypothesis: Neanderthals used magnesium to help light fires.
2. You will need to make two fires: a test fire and a control fire to compare it with.
3. You will need to decide what the measure of success is: e.g. flames appear more quickly on the fire with magnesium.
4. You will need to control variables: e.g. make sure the fires have the same amount of fuel, the same structure, the same lighting method etc...

#### Control fire

	
<p>1. Build a fire in a fire-bowl. Have some tinder (like paper) and some kindling (thin bits of wood).</p>	<p>2. Try and light this. Have the children count slowly to time how long until they see flames.</p>
	
<p>3. It took nearly a minute to make this piece of wood catch fire.</p>	<p>4. It went out again pretty quickly.</p>

### Test fire



5. Set up another fire-bowl. Try to use the same amount and kind of fuel and structure as the first fire.

6. The only difference should be the inclusion of magnesium powder or turnings.



7. Try to light this fire and get the children to count how long it is before they see flames. This fire took 24 seconds to light and it stayed alight.

8. The magnesium may give off white sparks. They don't travel far but keep about a metre from the flames, and don't breathe in the smoke.

Ask children what their conclusions are? Has the experiment proved the hypothesis correct?