

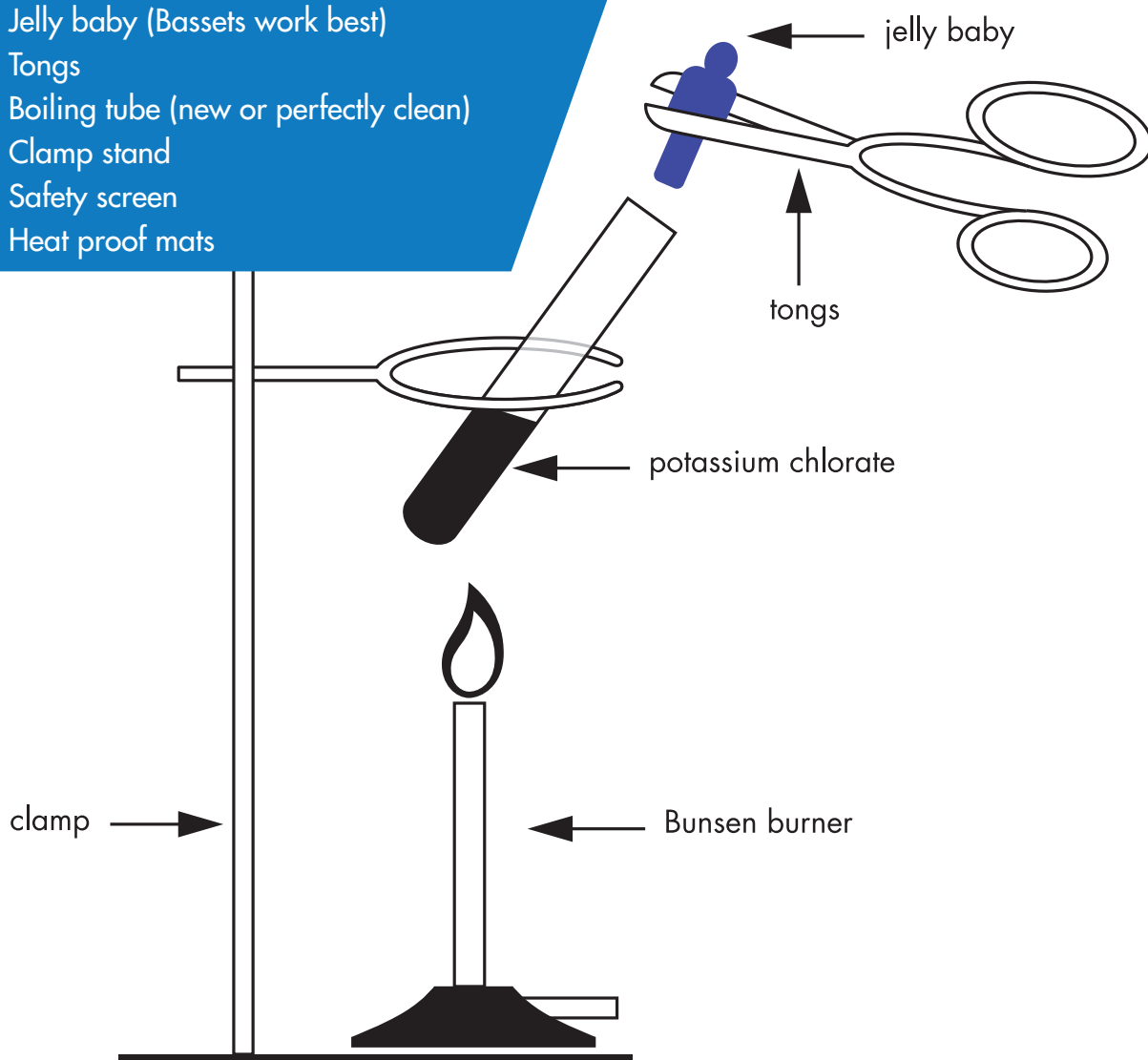
# Top 10 Flash Bang Demos

## Number 4 Screaming jelly babies

Horrify your students by **sacrificing** a jelly baby in the name of **science**

### Equipment

- 7g Potassium chlorate
- Jelly baby (Bassets work best)
- Tongs
- Boiling tube (new or perfectly clean)
- Clamp stand
- Safety screen
- Heat proof mats



### Safety precautions

A face shield and gloves should be worn by demonstrator. Students should be a minimum of 2 metres away and behind a safety screen. Potassium chlorate is oxidising, explosive and harmful (see hazzcard 77).

**Never** substitute sugar for the jelly baby as this will cause a violent reaction and an explosion may result.

See CLEAPSS supplementary risk assessment SRA01

Always carry out your own risk assessment for this demonstration.



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CHEMENG  
SHAPE THE FUTURE...



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## Method

- Assemble apparatus as shown in the diagram
- Place one safety screen in front of the apparatus and the other to the side (to make a 90 degree angle)
- Check that the jelly baby will fit easily into the boiling tube, you may need to squash it, and place to one side
- Using a spatula, insert potassium chlorate in the boiling tube
- Secure boiling tube in the clamp and ensure it's at a 45 degree angle pointing towards a safety screen
- Heat the boiling tube using a Bunsen burner until the potassium chlorate is completely molten
- Use the tongs to place jelly baby in boiling tube
- Stand back! The reaction will result in lots of noise, lilac flames and smoke
- Dispose of boiling tube safely after leaving to cool

## The science bit

The potassium chlorate rapidly oxidises the sugar in the jelly baby which produces carbon and other materials plus a large amount of heat. This ignites the jelly baby producing a smell reminiscent of candy floss. The production of gases in this demonstration produces a lot of noise - and if you're lucky - **a high pitched scream.**

## Demonstration tips and interesting facts

Ask your pupils to vote for one of four different jelly babies to be sacrificed for this demonstration.

**Instructions are in accordance with CLEAPSS guidelines and safety information.**