

## Clarification

### Topic: Mining and Rehabilitation

#### Background Information:

Clarification forms part of the Bayer Process. During clarification, sediments such as sand and mud are removed. Sand is caught in sand traps and washed. A flocculent is then added to thicken the mud which enables it to settle and be removed and washed.

#### You Will Need:

- Beaker or bowl (microwave safe)
- Microwave
- Butter
- Clear beaker or jar

#### What You Need to Do:

- Place butter in the bowl or beaker
- Heat gently in the microwave until melted (use a medium setting)
- Allow to cool
- Carefully pour into the clear beaker or jar leaving any sediment behind.

#### Extension/Alternatives:

- Explain what has happened.
- What is the sediment left behind?
- What other separation techniques could be used for this experiment?

#### Curriculum Links:

**Science:** Investigation, Natural and Processed Materials