## Autumn 2

C14 The Earth's resources

Aiming for Grade 8

# **Extended Homework Assignment**

Name: \_\_\_\_\_

Set: \_\_\_\_\_

## Instructions

A printed copy should be handed into your teacher.

The knowledge required to complete this assignment will be supported in class in lessons of the half term.



## C14 The Earth's resources – Aiming for Grade 8

### Aims

In this activity you will produce a script for a short 'mini-programme' for television or an online video channel (and will then perform this) about the different methods for extracting copper from its ores.

#### Learning outcomes

After completing this activity, you should be able to:

- describe and explain the different methods for extracting copper G
- discuss the issues surrounding the sustainability and effectiveness of the methods described

#### Task

Working in a group you are going to prepare a script for a 5-minute mini-programme about how copper can be extracted from its ores.

You will need to perform your mini-programme, so make sure you practise it once the script is written. You must make sure that each member of your group takes part in writing the script and performing it.

Your script should cover:

- how copper is extracted from copper-rich ores using sulfuric acid
- how copper is extracted from copper-rich ores by smelting
- how pure copper is obtained via electrolysis
- how copper is extracted from low-grade ores using phytomining
- how copper is extracted from low-grade ores using bioleaching
- the environmental issues surrounding these techniques.

You may need to make or obtain additional resources to use in your mini-programme, for example, photos or cards showing equations. *(18 marks)*