

## Science Skills Year 7 booklet: 3

### Investigating Cell Size

Task 1 deadline (self-assessed):

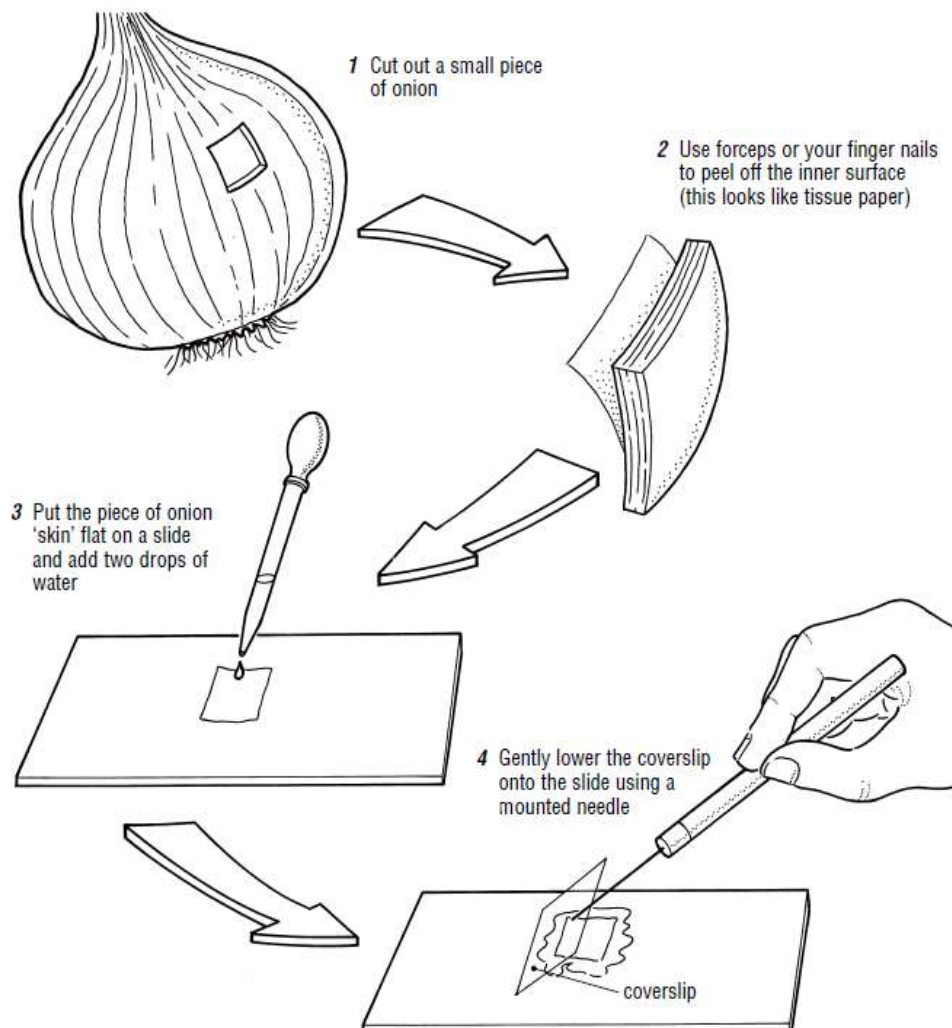
Task 2 deadline (peer-assessed):

Task 3 deadline (teacher-assessed):

The tasks in this booklet relate to the investigation below. Read the following information before attempting any of the tasks.

#### To investigate cells:

Before you can look at onion cells under the microscope, you must peel off a very thin layer:



## Task 1

*Everyone to do-* Match the key terms to the definitions:

Forceps
Magnify
Slide
Cover slip
Cell

A basic building block of living organisms
A small, very thin piece of glass.
A rectangular, thick piece of glass.
To view bigger than the actual size
Tweezers

**Green:** you will be tested on the spelling of the five key terms

**Amber:** you will be tested on the spelling and the definition of the key terms

**Red:** you will be tested on the spelling and definition of the key terms. You will also need to put each into a sentence

**Killer:** you will be asked for synonyms for the key terms (if there are any!)

**Task 2**

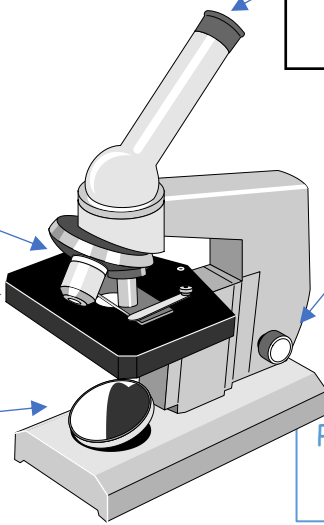
**Green:**

Label the diagram of a microscope below:

[Empty box for labeling]

[Empty box for labeling]

[Empty box for labeling]



[Empty box for labeling]

[Empty box for labeling]

Peer assessment score:

**Amber:**

Label the diagram above and DESCRIBE the role of each part.

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Peer assessment:  
STAR:  
STAR:  
WISH:

**Red:**

On a piece of A4 paper, write an improved method which includes how you use the microscope to view the cells. Remember to chunk the method into clear, small steps.

Peer assessment:

STAR:

STAR:

WISH:

**Task 3:**

**Green:** On a piece of A4 paper, draw what an onion skin cell looks like. Include 6 labels.

**Amber:** On a piece of A4 paper, write a risk assessment for this investigation so that it includes: what the risk is, how likely it is that the risk will occur and how the risk can be minimised. This should be a paragraph of 40+ words.

**Red:** On a piece of A4 paper, show how you would calculate the real size of the cell. This should include a mathematical equation and an example set of data. Then, explain why it is useful for us to be able to work out the real size of cells or their organelles.

Teacher assessment:

A2L = 1	Work is thorough, you have picked challenging tasks and have shown effort and understanding.
A2L = 2	Work has detail in most places, you have picked relevant tasks and have shown effort.
A2L = 3	Work lacks detail, there are some errors and shows some lack of preparation/understanding.
A2L = 4	Work is incomplete, there are errors throughout and a clear lack of preparation/understanding.

Teacher comment: