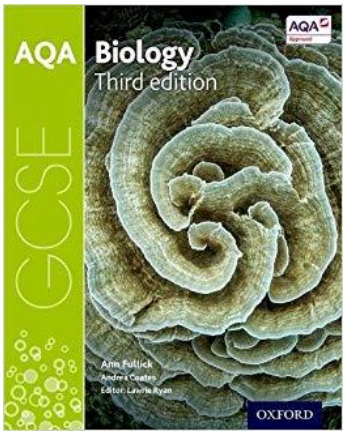
Extended Homework Task

Biology B9 - Respiration

Aiming for Grade 8

Name ……

Please hand in a completed printed version at the end of the topic



The online text book access to support this homework can be accessed through your Kerboodle account at www.kerboodle.com.

The username is your first initial and surname (no gap).

If you have not accessed the book before the password will be the same as your username. If you have logged on before you will have changed the password to your own choice.

Click onto the science 9-1 tile and then onto the digital book.

Resources to support this homework can be found in the online student book

- **Respiration pages 134-143**

B9 Respiration – Aiming for Grade 8

Aims

The aim of this Homework is to help you revise the main topics in Chapter B9.

Learning outcomes

After completing this homework, you should be able to:

- State the word and symbol equations for aerobic and anaerobic respiration.
- Construct an exam question on respiration.
- Complete an exam question for respiration and provide feedback.

Task

Question 1 You will be explaining and drawing conclusions based on a number of examples of respiration.

Question 2 You will be writing an exam question and mark scheme about aerobic or anaerobic respiration.

Questions:

1 Describe, explain, and write a conclusion for each for the observations you make of each example.

Task 1: Breathe on the cold mirrors. – (watch this clip - Breathing on cold mirror – https://www.youtube.com/watch?v=Y0nCzFUegl8)

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Task 2: Breathing into limewater https://www.youtube.com/watch?v=xvQNaAFkE6c

(Science Experiment : Carbon Dioxide and Limewater Breath Test)

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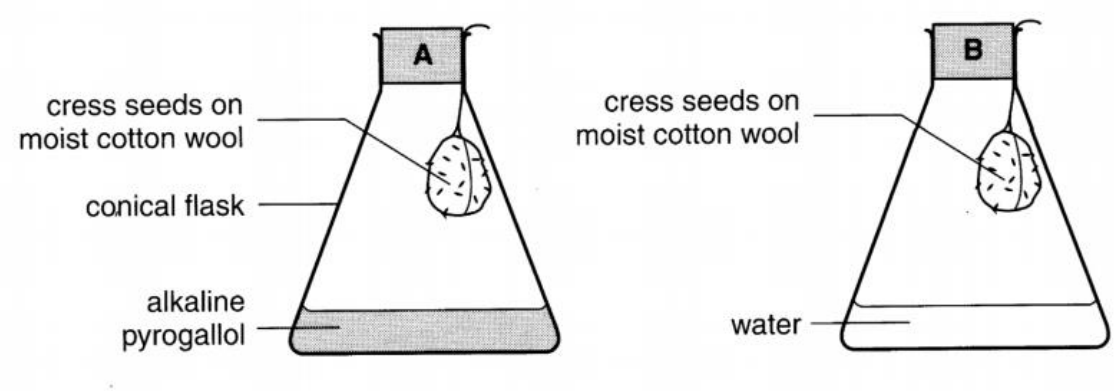
Task 3: Observe the two flasks. (Hint: Pyrogallol removes oxygen.) What differences would we expect to see in the growth of the cress seeds and why?



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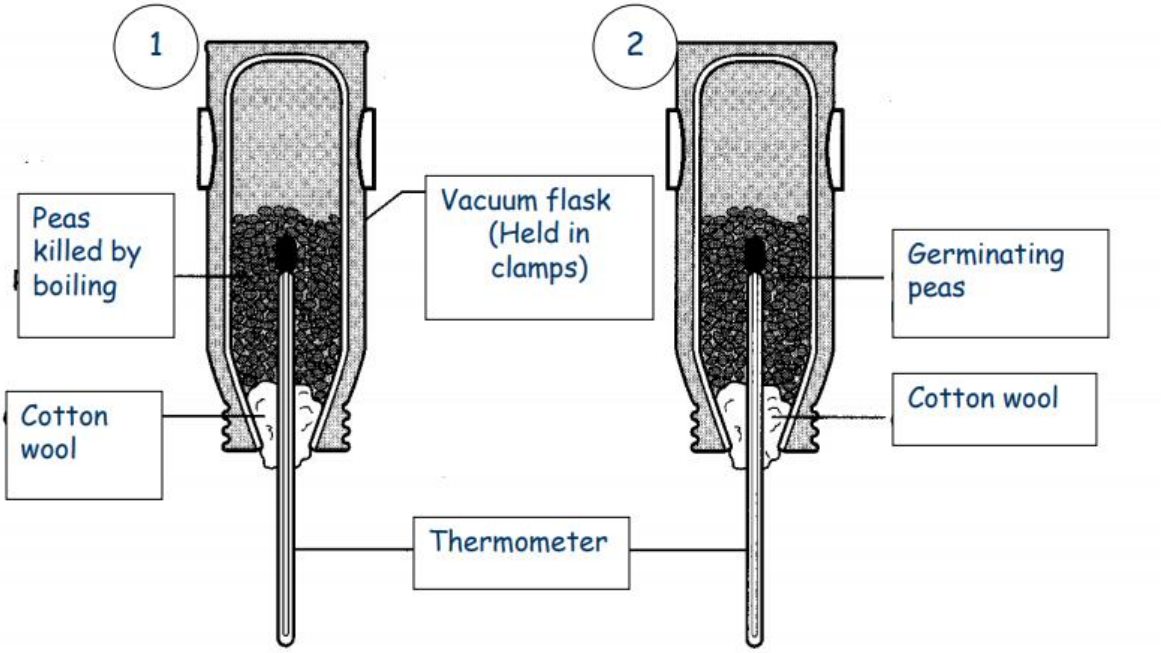
Task 4: Observe the two flasks. What differences would we expect to see between these two experiments? Why?



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Task 5: **Watch this video clip -** https://www.youtube.com/watch?v=HFGJrOHvIb8 (Bread Rising Time Lapse — It's Alive!) Explain what is happening.

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Use the information above to help you write equations for aerobic and anaerobic respiration.

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Question 2

Choose either aerobic or anaerobic respiration.

- Write an exam question on your type of respiration.
- Your exam question must contain several parts and cover **eight** marks.
- Think about what you need to know about respiration.
- Try to have a balance of shorter answer questions and extended writing.
- Use command words such as state/describe/explain.
- Create a mark scheme for your exam question.

If possible, swap it with a friend and get them to answer your question. Mark them based on your mark scheme.