Year 7 Biology
Spring 1 Level Ladder

All students are expected to master at least the Level 4 content by the end of the half term.

Check Arbor or ask your child what their current working and target level is in science

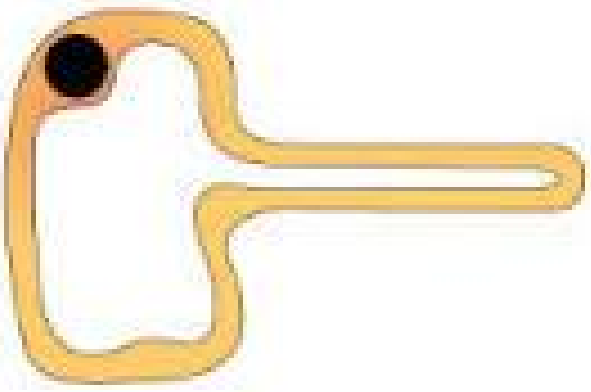
Topics: Cells

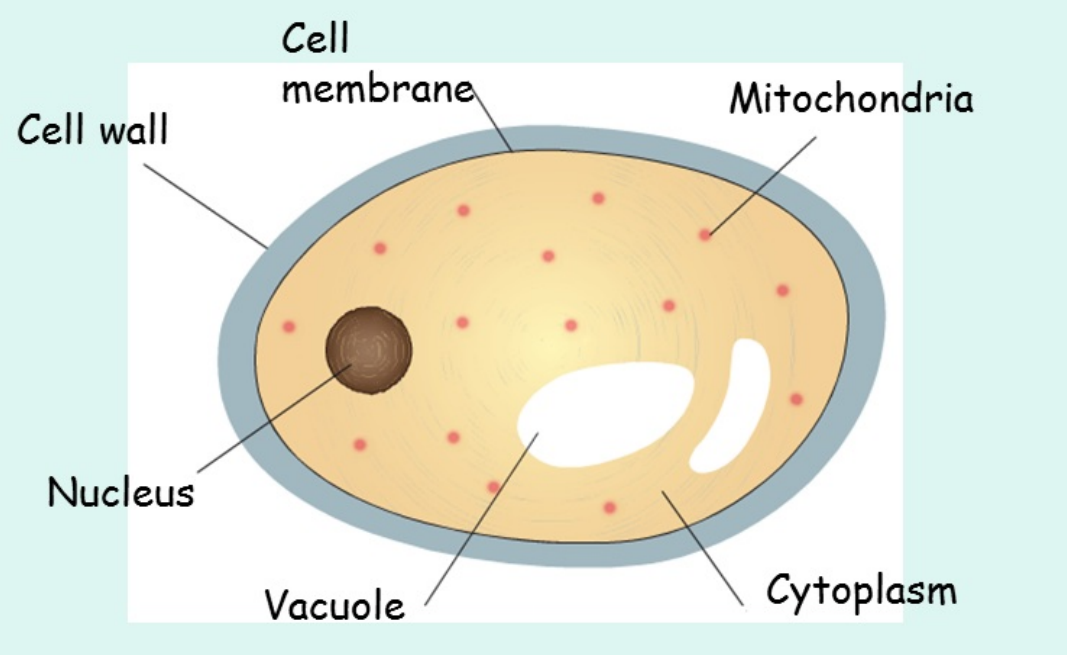
EG:

4A - mastered all of the Level 4 content

4B - mastered some of the Level 4 content

4C - mastered all of the Level 3 content and beginning to master some Level 4 content

Level	Sample tasks
3	1. Name 3 types of micro-organisms. 2. Say what we mean by micro-organism.
4	1. Describe the function (job) of the cell below.  2. Carry out an experiment using an agar plate, describing what we need the agar plate for and what conditions we need to leave it in.
5	1. Explain two ways the cell above is adapted to its function. 2. Explain what we can use yeast for, using respiration by-products in your answer.

6	1. Using our knowledge of respiration, suggest what type of respiration yeast carries out. 2. Compare respiration in yeast to respiration in animals.
7	1. Suggest whether the yeast cell below is more like an animal or plant cell, using your knowledge of cell structure in your explanation. 

Year 7 Physics
Spring 1 Level Ladder

All students are expected to master at least the Level 4 content by the end of the half term.

Check Arbor or ask your child what their current working and target level is in science

Topics: States of matter

EG:

4A - mastered all of the Level 4 content

4B - mastered some of the Level 4 content

4C - mastered all of the Level 3 content and beginning to master some Level 4 content

Level	Sample tasks
3	1. Draw the circuit symbol for a bulb. 2. Give an example of an insulator. 3. Give an example of a conductor.
4	1. Describe how a series and a parallel circuit are different. 2. Describe what we mean by 'electric current', using the word *electrons*.
5	1. Explain how current travels around a parallel circuit and one advantage of a parallel circuit. 2. Explain the difference between voltage and current.
6	1. Explain why bulbs are brighter in parallel than in series (assuming the same bulbs and batteries). Use the word *current* in your answer.
7	1. Evaluate our model of an electric circuit, suggesting ways it is accurate and not accurate.

Year 7 Chemistry
Spring 1 Level Ladder

All students are expected to master at least the Level 4 content by the end of the half term.

Check Arbor or ask your child what their current working and target level is in science

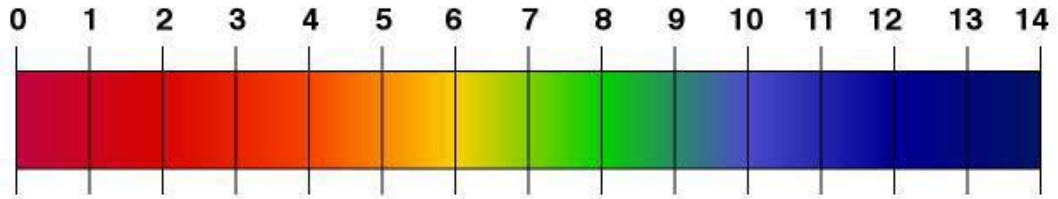
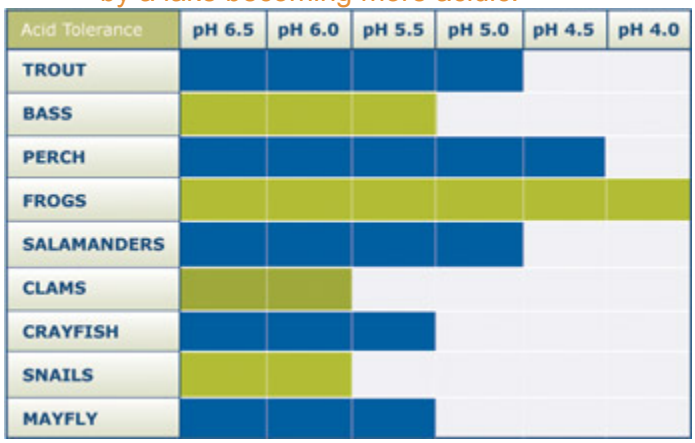
Topics: Separation techniques

EG:

4A - mastered all of the Level 4 content

4B - mastered some of the Level 4 content

4C - mastered all of the Level 3 content and beginning to master some Level 4 content

Level	Sample tasks
3	1. Give examples of acids and alkalis you would find in your house. 2. Give an example of something 'neutral'.
4	1. Describe what an indicator does. 2. Describe what this table below shows us. 
5	1. Explain what neutralisation is. 2. Use your knowledge of acids and alkalis to explain what acid rain is and why it is an increasing problem.
6	1. Interpret the table below, explaining which animals would be most affected by a lake becoming more acidic. 
7	1. Suggest whether an acid or an alkali is stronger, based on results from a neutralisation experiment.

In science in year 7, students study the sciences as three separate subjects.

Each week students will have one physics lesson, one chemistry lesson and one biology lesson.

Students will be assessed on their understanding of each science.

Students will be given one level for science (rather than three separate ones) each half term. This will be the mean across the three sciences.