

## Summer Science Revision

To be able to complete this summer revision task you must have set up your my GCSE account using the code given to you at parents evening. If you are not sure about this please contact Mrs Norris ([pnorris@johncolet.co.uk](mailto:pnorris@johncolet.co.uk)).

You need to watch the videos and make notes about what it is teaching you. It would be a good idea to have a folder to keep your notes together (or you can get an extra exercise book from Science). You should then have a go at the exam paper questions which go with each video. You do not have to print the questions you can just write your answers on paper. Don't forget to self-assess your answers using the markscheme on the website. Remember to use the traffic light tool on the website to let your teacher know how you confident you are with each topic.

These are all the topics you have covered so far in Science, so you do not have to complete it all by the end of the summer holiday (but you will need them all by the end of Year 11). You might already be able to tick some off from your revision this year.

### Summer holiday target

Gold target: 36 videos and their notes (2 videos per science per week).

Silver target: 18 videos and their notes (1 video per science per week).

Bronze target: 6 videos and their notes (1 video per week).

If it is difficult for you to access the internet you can revise a topic from the revision guide, the target for this is you should have completed revision notes for at least 6 topics by the end of the summer holiday.

**You need to bring your folder or book of notes and answers with you in September.**

## Biology

| JC Topic Name               | Paper Number | Combined kerboodle textbook chapter | my-GCSEscience videos                         | Notes made? | Mark on exam questions? |
|-----------------------------|--------------|-------------------------------------|---|-------------|-------------------------|
| Communicable Diseases       | Bio 1        | B5 and B6                           | Preventing the spread of pathogens            |             |                         |
|                             |              |                                     | Viral, bacterial, fungal and protist diseases |             |                         |
|                             |              |                                     | Immunity and vaccination                      |             |                         |
|                             |              |                                     | Fighting diseases with drugs                  |             |                         |
| Heart and lifestyle disease | Bio 1        | B4 (4.1-4.5), B7                    | Cardiovascular disease                        |             |                         |
|                             |              |                                     | The circulatory system                        |             |                         |
|                             |              |                                     | Health and risk factors                       |             |                         |

|                                 |       |                           |   |  |  |
|---------------------------------|-------|---------------------------|---|--|--|
| Cell structure                  | Bio 1 | B1                        | Eukaryotic and prokaryotic cells        |  |  |
|                                 |       |                           | Specialised cells                       |  |  |
|                                 |       |                           | Microscope and magnification 1 + 2      |  |  |
|                                 |       |                           | Culturing microorganisms                |  |  |
| Plant tissues                   | Bio 1 | B4 (4.6-4.9)              | Transpiration in plants                 |  |  |
|                                 |       |                           | Organisation in plants                  |  |  |
| Reproduction                    | Bio 2 | B12                       | Screening for genetic disorders         |  |  |
| The nervous system              | Bio 2 | B10                       | The nervous system                      |  |  |
| Classification                  | Bio 2 | B14 (14.9 and 14.10 only) | Classification and evolutionary trees   |  |  |
| Adaptations and interdependence | Bio 2 | B15                       | Communities and interdependence         |  |  |
|                                 |       |                           | Adaptations                             |  |  |
|                                 |       |                           | Measuring the distribution of organisms |  |  |
| Organisation of an ecosystem    | Bio 2 | B16                       | Cycling in ecosystems                   |  |  |
| Biodiversity                    | Bio 2 | B17                       | Human impact on the environment         |  |  |

## Chemistry

| JC Topic Name      | Paper Number | Combined kerboodle textbook chapter | my-GCSEscience videos                | Notes made? | Marks on exam questions? |
|--------------------|--------------|-------------------------------------|--------------------------------------|-------------|--------------------------|
| The periodic table | Chem 1       | C1 and C2                           | Atoms, elements, compounds, mixtures |             |                          |
|                    |              |                                     | Separating mixtures                  |             |                          |
|                    |              |                                     | Scientific models of atoms           |             |                          |
|                    |              |                                     | Atomic structure                     |             |                          |
|                    |              |                                     | Relative atomic mass                 |             |                          |
|                    |              |                                     | Electronic structure                 |             |                          |
|                    |              |                                     | The periodic table                   |             |                          |

|                       |        |     |  |  |  |
|-----------------------|--------|-----|--|--|--|
|                       |        |     | Group 0 - The noble gases                |  |  |
|                       |        |     | Group 1 - The alkali metals              |  |  |
|                       |        |     | Group 7 - The halogens                   |  |  |
| The atmosphere        | Chem 2 | C11 | The Earth's atmosphere                   |  |  |
|                       |        |     | The greenhouse effect and global warming |  |  |
|                       |        |     | Atmospheric pollutants                   |  |  |
|                       |        |     | Potable water                            |  |  |
| Life cycle assessment | Chem 2 | C12 | Life cycle assessment                    |  |  |

## Physics

| JC Topic Name                          | Paper Number | Combined kerboodle textbook chapter | my-GCSEscience videos                           | Notes made? | Marks on exam questions? |
|--|--------------|-------------------------------------|---|-------------|--------------------------|
| Conservation and dissipation of energy | Phys 1       | P1                                  | Energy changes in a system                      |             |                          |
|  |              |                                     | Power   |             |                          |
|  |              |                                     | Conservation and dissipation of energy          |             |                          |
|  |              |                                     | Power and energy transfers                      |             |                          |
|  |              |                                     | Work done and energy transfer                   |             |                          |
|  |              |                                     | Forces and elasticity                           |             |                          |
| Energy transfer by heating             | Phys 1       | P1                                  |   |             |                          |
| National and global energy resources   | Phys 1       | P3                                  | National and global energy resources            |             |                          |
|  |              |                                     | The national grid                               |             |                          |
| Particle model                         | Phys 1       | P6                                  | Density   |             |                          |
|  |              |                                     | Solids, liquids and gases                       |             |                          |
|  |              |                                     | Specific heat capacity and specific latent heat |             |                          |
|  |              |                                     | Particle model and pressure                     |             |                          |

|        |        |    |  |  |  |
|--------|--------|----|--|--|--|
| Motion | Phys 2 | P9 | Distance and displacement,<br>speed and velocity |  |  |
|        |        |    | Distance-time graphs                             |  |  |
|        |        |    | Acceleration                                     |  |  |
|        |        |    | Velocity-time graphs                             |  |  |
|        |        |    | Falling objects                                  |  |  |