Learning Journey Map
Year 9 Science

Year 9 Survival Top Tips	
Tip 1	Learn and revise vocabulary weekly, use glossaries given and - Quizlet/Seneca/Educake
Tip 2	Use ' Youtube- e.g. myGCSE, MrExham to help review key skills and concepts
Tip 3	Use GCSE Bitesize/Kerboodle resources/past OCR questions
Tip 4	Use the Pixl Resources on Firefly & therapy questions
Tip 5	Read online science news, watch science documentaries

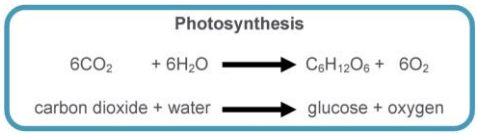
Start GCSE

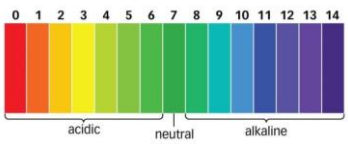
Learn how to fly a plane with cadets

Why is our atmosphere important?
(The earth and the atmosphere)
- ❑ Composition and evolution of the atmosphere
- ❑ Carbon cycle
- ❑ Climate change
- ❑ Recycling

Why do we depend on plants?
(Plants and ecosystems)
- ❑ Plants for food/ importance of plants
- ❑ Photosynthesis
- ❑ Limiting factors
- ❑ Transpiration / Xylem + Phloem

Join the Lego Robots team





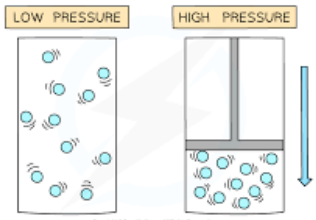
Are acids always dangerous?
(Chemical changes)
- ❑ Acids and danger
- ❑ Alkalis
- ❑ Indicators
- ❑ Neutralisation
- ❑ Acids and metals
- ❑ Acids and metal carbonates
- ❑ Acid rain

Why are metals useful?
(Chemical changes)
- ❑ Metals and Oxygen
- ❑ Metals and Water
- ❑ Metal displacement reactions
- ❑ Extracting metals
- ❑ Ceramics, polymers and composites
- ❑ Recycling

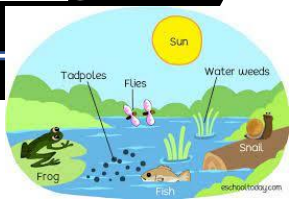
Take part in the Physics BIG Quiz at Birmingham University

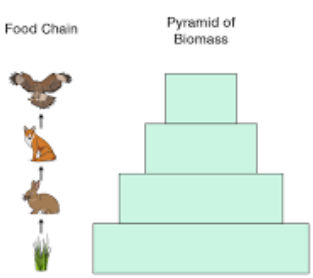
METAL + ACID → SALT + HYDROGEN

What are the effects of forces?
(Forces and motion)
- ❑ Speed
- ❑ Measuring Speed
- ❑ Distance Time Graphs
- ❑ Effect of balanced and unbalanced forces on speed
- ❑ Falling objects
- ❑ Pressure in gases
- ❑ Pressure in liquids
- ❑ Pressure in solids
- ❑ Turning forces - levers
- ❑ Turning forces - moments



$$\text{SPEED (m/s)} = \frac{\text{DISTANCE (m)}}{\text{TIME (s)}}$$





1. How do organisms live and survive together?
(Plants and ecosystems)
- ❑ Adaptation and Competition
- ❑ Food Chains and Food Webs
- ❑ Feeding Relationships
- ❑ Pyramids of Number and Biomass
- ❑ Bioaccumulation
- ❑ Biodiversity
- ❑ Monitoring Ecosystems
- ❑ Conservation

Start Y9

CURRICULUM OVERVIEW

Development of key scientific skills: planning valid experiments, carrying out practicals safely, displaying & processing data, analysing & evaluating results

Possible careers:

Research scientist, Biologist, Doctor, Nurse, Forensic scientist, Ecologist, Farmer, Athlete, Nutritionist, Sports scientist, Personal trainer, Physiotherapist, Biochemical engineer, Civil Engineer, Paramedic, Renewable energy engineer, CSI, Brewer, Police officer, Astrophysicist

CURRICULUM OVERVIEW