

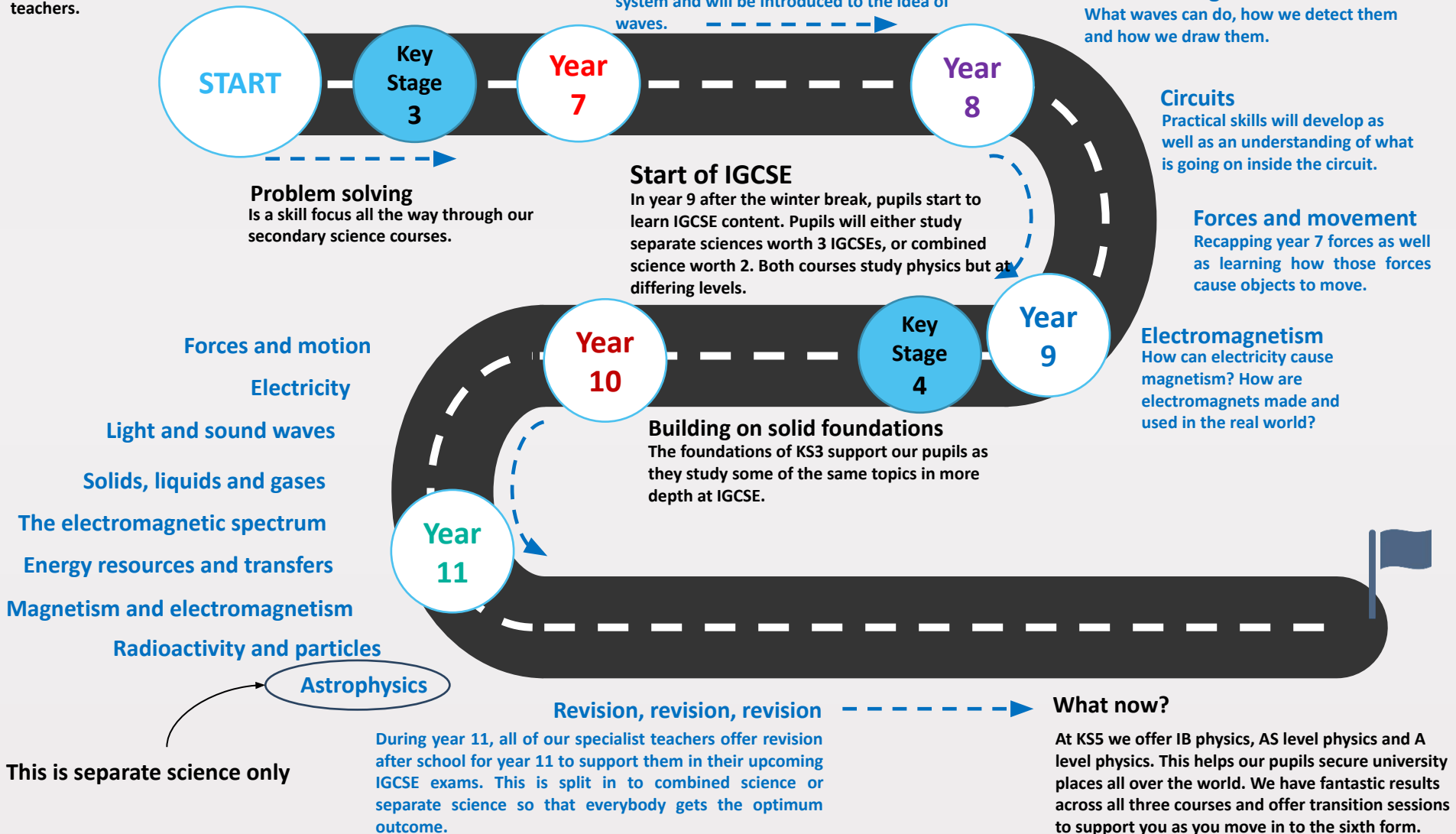
# Physics at DBS

## Introducing the 'big ideas'

Our curriculum is built around evidence based progression through the key concepts of science. We focus not just on the core knowledge pupils need, but embedding key skills throughout the course.

## The Journey Starts - Transition

Pupils try a taster lesson in year 6 to see what secondary science lessons are like and meet the teachers.

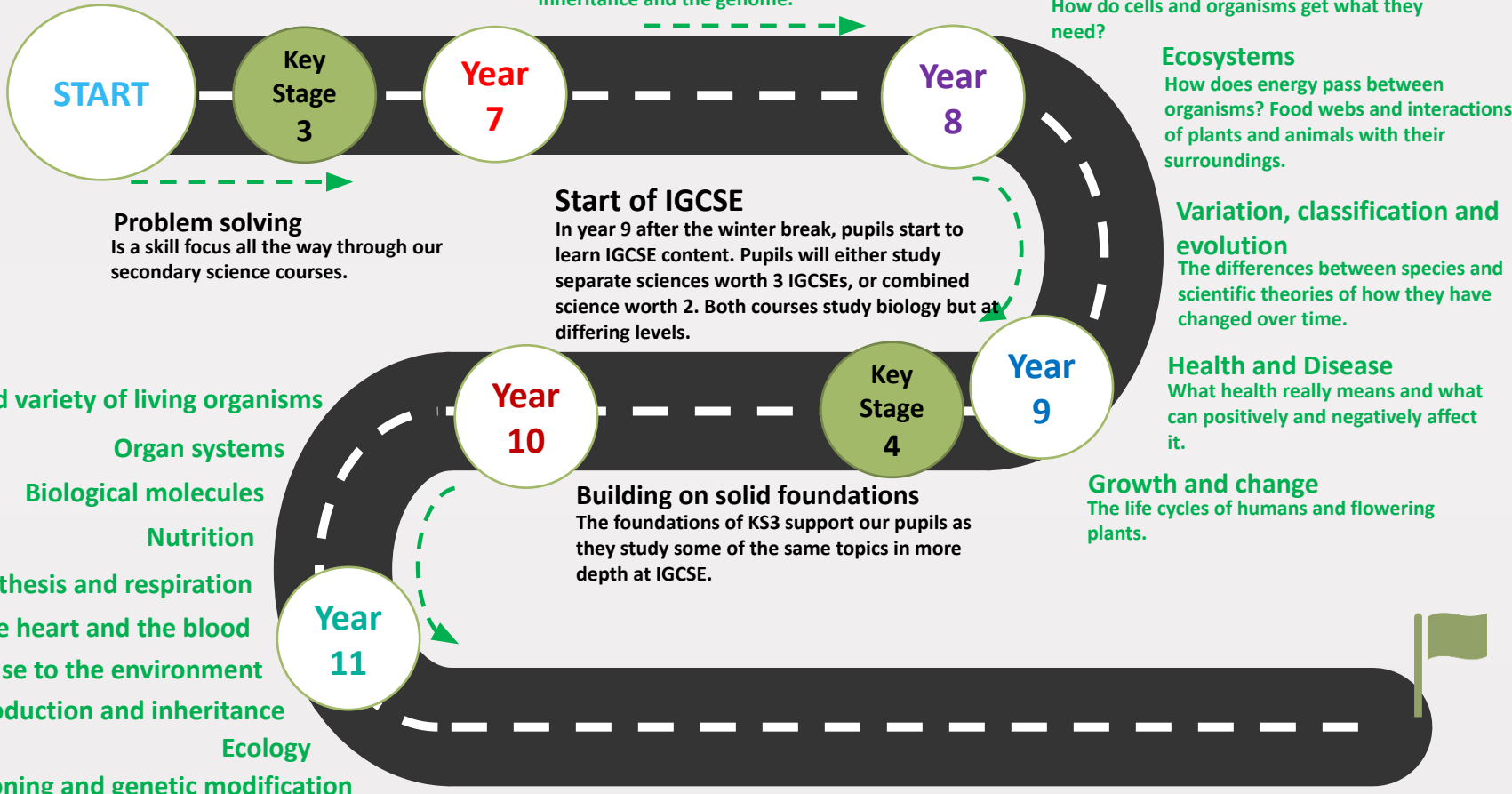


# Biology at DBS

**Introducing the 'big ideas'**  
 Our curriculum is built around evidence based progression through the key concepts of science. We focus not just on the core knowledge pupils need, but embedding key skills throughout the course.

## The Journey Starts - Transition

Pupils try a taster lesson in year 6 to see what secondary science lessons are like and meet the teachers.



**START**

**Key Stage 3**

**Year 7**

**Year 8**

**Year 9**

**Year 10**

**Year 11**

**Problem solving**  
 Is a skill focus all the way through our secondary science courses.

**Start of IGCSE**  
 In year 9 after the winter break, pupils start to learn IGCSE content. Pupils will either study separate sciences worth 3 IGCSEs, or combined science worth 2. Both courses study biology but at differing levels.

**Building on solid foundations**  
 The foundations of KS3 support our pupils as they study some of the same topics in more depth at IGCSE.

**Revision, revision, revision**  
 During year 11, all of our specialist teachers offer revision after school for year 11 to support them in their upcoming IGCSE exams. This is split in to combined science or separate science so that everybody gets the optimum outcome.

**Biochemistry**  
 How do cells and organisms get what they need?

**Ecosystems**  
 How does energy pass between organisms? Food webs and interactions of plants and animals with their surroundings.

**Variation, classification and evolution**  
 The differences between species and scientific theories of how they have changed over time.

**Health and Disease**  
 What health really means and what can positively and negatively affect it.

**Growth and change**  
 The life cycles of humans and flowering plants.

**What now?**  
 At KS5 we offer IB Biology and IB Environmental Systems and Societies, AS level biology and A level biology. This helps our pupils secure university places all over the world. We have fantastic results across all three courses and offer transition sessions to support you as you move in to the sixth form.

The nature and variety of living organisms

Organ systems

Biological molecules

Nutrition

Photosynthesis and respiration

The heart and the blood

Response to the environment

Reproduction and inheritance

Ecology

Cloning and genetic modification

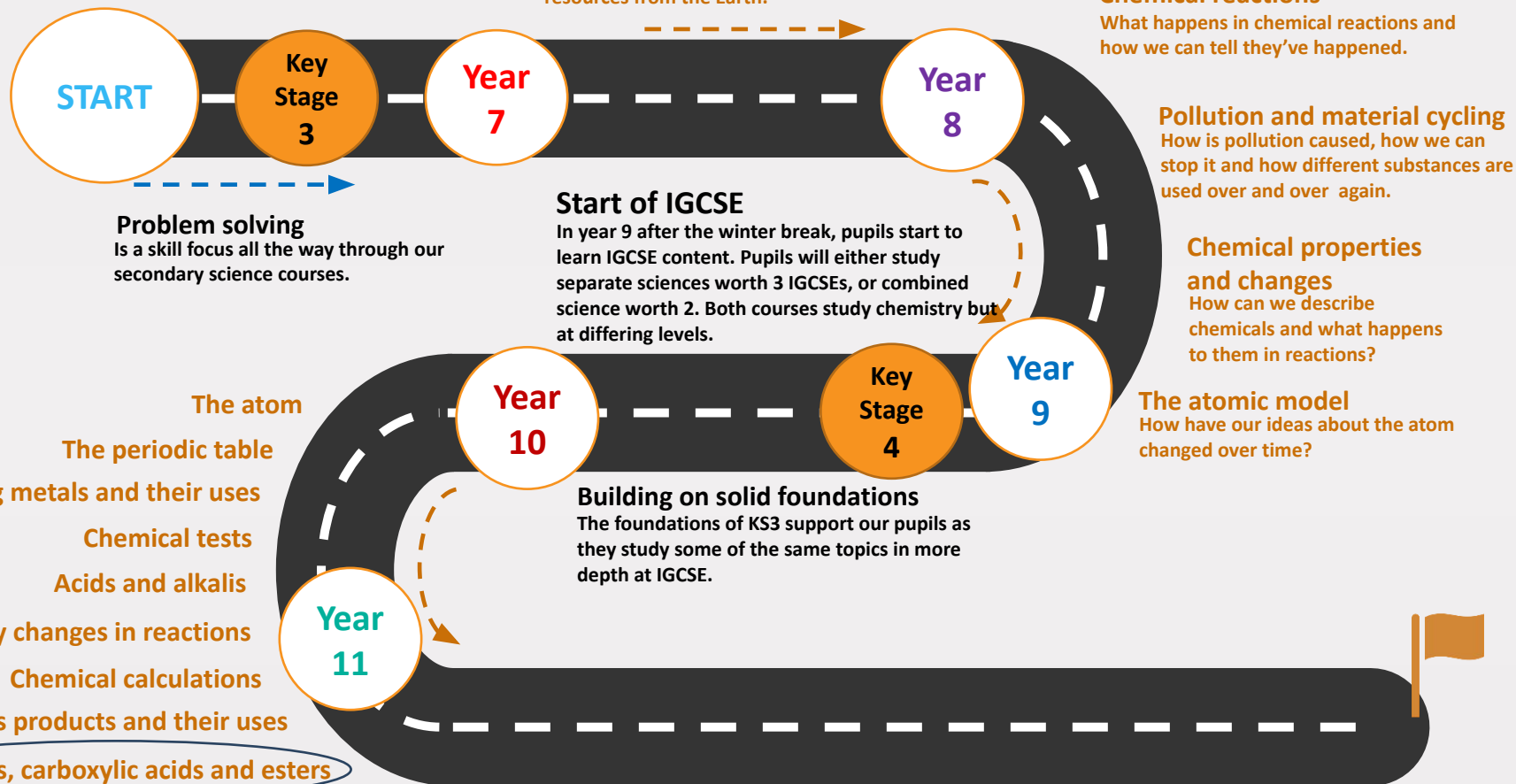
# Chemistry at DBS

## Introducing the 'big ideas'

Our curriculum is built around evidence based progression through the key concepts of science. We focus not just on the core knowledge pupils need, but embedding key skills throughout the course.

## The Journey Starts - Transition

Pupils try a taster lesson in year 6 to see what secondary science lessons are like and meet the teachers.



In year 7, pupils will study elements, compounds and mixtures, solubility and resources from the Earth.

### Chemical reactions

What happens in chemical reactions and how we can tell they've happened.

### Pollution and material cycling

How is pollution caused, how we can stop it and how different substances are used over and over again.

### Chemical properties and changes

How can we describe chemicals and what happens to them in reactions?

### The atomic model

How have our ideas about the atom changed over time?

### Problem solving

Is a skill focus all the way through our secondary science courses.

### Start of IGCSE

In year 9 after the winter break, pupils start to learn IGCSE content. Pupils will either study separate sciences worth 3 IGCSEs, or combined science worth 2. Both courses study chemistry but at differing levels.

### Building on solid foundations

The foundations of KS3 support our pupils as they study some of the same topics in more depth at IGCSE.

### The atom

### The periodic table

### Extracting metals and their uses

### Chemical tests

### Acids and alkalis

### Energy changes in reactions

### Chemical calculations

### Crude oil, its products and their uses

### Alcohols, carboxylic acids and esters

### Revision, revision, revision

During year 11, all of our specialist teachers offer revision after school for year 11 to support them in their upcoming IGCSE exams. This is split in to combined science or separate science so that everybody gets the optimum outcome.

### What now?

At KS5 we offer IB chemistry, AS level chemistry and A level chemistry. This helps our pupils secure university places all over the world. We have fantastic results across all three courses and offer transition sessions to support you as you move in to the sixth form.

This is separate science only