Edexcel International Primary Curriculum

Science

Specification

First examination June 2012

Edexcel International Award in Primary Science (JSC01)

ALWAYS LEARNING PEARSON

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Acknowledgements

This specification has been produced by Edexcel on the basis of consultation with teachers, examiners, consultants and other interested parties. Edexcel would like to thank all those who contributed their time and expertise to its development.

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Publications Code PL033392

Introduction

Key aims of the Edexcel International Curriculum

The Edexcel International Curriculum:

- **giving a solid foundation for lifelong learning** and provides excellent preparation for further study at International GCSE and GCE A level or equivalent
- **provides an international benchmark of achievement,** with externally marked achievement tests and certification at the end of Year 6 to ease the transition to secondary education
- **is easy to implement and administer,** with free training and a fully flexible structure that allows you to teach it alongside other curricula
- **is engaging and up to date,** with ideas for lessons and a framework that allows you to embed knowledge creatively
- **allows you to track pupils' progress and identify barriers to learning** through a variety of age-specific progress and achievement tests
- **offers unrivalled and unique delivery support,** with detailed suggestions of published resources embedded within each unit to help you implement the curriculum
- **gives you and your pupils a seamless and cohesive teaching and learning experience**, especially when used alongside other Edexcel qualifications for ages 8-19.

Key features and benefits of the achievement test

The achievement test:

- gives pupils a tangible record of achievement to use when progressing to 11-14 studies, and then on to International GCSE or equivalent
- is externally marked by Edexcel so you can be assured of the level of achievement of your pupils
- complies with rigorous global standards
- provides certification at the end of Year 6.

Contents

Specification at a glance

The Edexcel International Award in Primary Science comprises one test.

Test	**Paper code JSC01/01**
• Externally assessed • Availability: June series • First assessment: June 2012	
Overview of content Life processes and living things • Unit 1: Interdependence and adaptation • Unit 2: Micro-organisms Materials and their properties • Unit 3: More about dissolving • Unit 4: Reversible and irreversible changes Physical processes • Unit 5: Balanced and unbalanced forces • Unit 6: How we see things • Unit 7: Changing circuits • Unit 8: Scientific enquiry	
Overview of assessment • Section A consists of 45 marks addressing, with equal weighting, life processes and living things, materials and their properties and physical processes. • Section B consists of 15 marks on scientific enquiry. • The test duration is 1 hour. Questions target levels P1, P2 and P3.	

Award content

This Edexcel International Award in Primary Science requires pupils to demonstrate knowledge, understanding and application of the following learning objectives drawn from Year 6 of the International Curriculum. The content amplification also includes aspects of learning from Years 3, 4 and 5.

Unit 1: Interdependence and adaptation

Learning objective	**Pupils should:**
a) Understand that plants use air and water to make new materials for growing, and that they need light and leaves to be able to do this	• recall that air, water and light are needed for plant growth. • understand that leaves are the site of food manufacture and are therefore necessary for plant growth.
b) Know that water and nutrients are taken into the plant by the roots	• identify roots in a variety of plants e.g. germinating seed, seedling, adult plant. • understand that water from the soil is taken into a plant via its roots.
c) Identify some of the nutrients that plants need	• know that plants need magnesium (to maintain a green colour) and nitrates (for growth). • know that nutrients can be provided by using fertiliser.
d) Know that features such as flower colour, flower shape and leaf shape are ways of telling the difference between plants	• use a simple key to identify plants using these or similar criteria.
e) Know that features such as colour, body covering and number of legs are ways of telling animals apart	• use a simple key to identify animals using these or similar criteria.
f) Understand that there are differences between the same type of plants growing in different areas	• know the term *variation* and be able to use it with reference to differences between the same type of plant.
g) Know that the place where a living thing lives is called a habitat	• define the term *habitat* correctly. • suggest the type of habitat in which an organism might live when given simple data or photographs/diagrams.

Learning objective	Pupils should:
h) Know that a food chain starts with a producer, and that living things that eat other living things are called consumers	• identify producers and consumers in simple food chains/food webs.
i) Know how plants and animals are suited to where they live	• define the term *adaptation* correctly. • understand that all animals and plants perform life processes such as movement, growth, reproduction, respiration; they require nutrition, excrete waste and respond to stimuli. • suggest how an organism is adapted to its environment by looking at photographs or diagrams.
j) Know that different plants require different conditions to grow well	• understand that plants colonise a range of habitats because they have differing requirements for light, water and soil nutrients. • understand that some plants are more tolerant of adverse conditions than others (e.g. trampling, shade). • use simple data to suggest reasons for differences in plant distribution.
k) Know how to identify characteristics of soils which will suit a soil-living animal, and which allow roots to anchor a plant firmly	• use a simple key to identify soil types. • understand that soil-living animals, such as earth worms, require moist, loosely packed soil. • understand that plants will grow better in moist soil that has plenty of nutrients. • examples of soils should include woodland, clay, chalky, sandy and general garden topsoil.
l) Know that animals which eat other animals are described as predators and that the animals which are eaten are described as prey	• use the terms *predator* and *prey* correctly. • identify predators and prey in simple food chains/food webs.

Learning objective	Pupils should:
m) Know that plant-eating animals are herbivores and that animals which eat animals are carnivores	• use the terms *herbivore* and *carnivore* correctly. • identify herbivores and carnivores in simple food chains/food webs. • understand how type of teeth relates to diet (e.g. comparing teeth used for each type of diet).
n) Know that different pond plants are suited to different conditions in a pond	• understand that plants differ in their requirements for light or tolerance of shade and will be positioned in the pond accordingly. • understand that availability of nitrates in the pond will affect plant growth.

Unit 2: Micro-organisms

Learning objective	Pupils should:
a) Know that very small living things, called micro-organisms, can cause disease	• understand that micro-organisms are so small that a microscope is needed to see them. • know the terms *bacterium/bacteria*, *fungus*/*fungi* and *virus* [cellular detail or differences between these organisms are **NOT** required]. • know that some bacteria, some fungi and all viruses can cause disease. The term *germs* will **NOT** be credited and should be avoided.
b) Know that micro-organisms feed, grow and reproduce like other organisms	• link this to knowledge and understanding of the life processes of all living organisms [the exceptions relating to viruses need **NOT** be considered].
c) Know that micro-organisms cause decay and are used in food production	• understand that bacteria and fungi are involved in the process of decay and that this can be helpful (e.g. breakdown of dead leaves/plants/animals) or harmful (e.g. food spoilage). • understand that bacteria and fungi can be used in food production such as yoghurt making (bacteria) and bread making (fungus). Fungi are also used in cheese making [specific named examples are **NOT** required].

Unit 3: More about dissolving

Learning objective	**Pupils should:**
a) Understand what dissolving is and know that undissolved solids can be recovered from a liquid by filtering	• use the terms *solution* and *dissolve* correctly. [The terms solute and solvent are **NOT** required, but reference to the solid 'disappearing' should be avoided]. • know that sugar and salt will dissolve but substances such as flour and sand will not. • understand that filtration can be used to recover flour/sand but not sugar/salt and be able to transfer this understanding to other examples. [The terms *filtrate* and *residue* are **NOT** required].
b) Know what a mixture is	• define a mixture as being two or more substances that have been mixed together but not joined chemically. The substances can be separated again using, for example, a magnet, filtration, sieving.
c) Know that when a liquid evaporates any dissolved solids in it will stay behind	• know that a dissolved solid can be recovered from a solution by evaporating the liquid in which it was dissolved. A salt solution should be considered as an example.
d) Understand that dissolving can be speeded up by using hotter water, stirring faster and using a fine powder	• know these three methods of speeding up dissolving (reasons why each is effective are not required).
e) Know how to investigate factors affecting the speed at which something dissolves	• investigations should include the use of a fair test to compare different types of sugar, different water temperatures using sugar or salt and different speeds of stirring.

Learning objective	Pupils should:
f) Understand that there is a limit to how much solid will dissolve in a liquid	• the term *saturated solution* does **NOT** need to be known, but there should be an awareness that seeing undissolved solid will indicate that the solution has reached this point. • understand that a point will be reached after which there is no room for further solid to dissolve.
g) Know that as you increase the temperature of a liquid, the solubility of solids in it increases	• the reasoning behind this is **NOT** required.
h) Understand that different amounts of different solids will dissolve in a given volume of water	• be able to interpret data on this, presented as a simple table or graph.
i) Know that liquids and gases can mix with and dissolve in liquids	• be able to use the terms *emulsion* and *foam* correctly with reference to simple examples (e.g. salad dressing, shaving foam, whipped cream).

Unit 4: Reversible and irreversible changes

Learning objective	Pupils should:
a) Identify whether changes are reversible or irreversible	• understand that heat can make some materials change irreversibly. • use the terms *reversible* and *irreversible* correctly. • Use the terms *evaporation*, *condensation*, *melting* and *freezing* correctly.
b) Recognise that irreversible changes often make new and useful materials	• understand this using simple examples such as baking a cake, burning wood.
c) Know that burning is an irreversible change, and recognise some of the hazards of burning materials	• know this using examples such as candles, wood or gas burning.

Unit 5: Balanced and unbalanced forces	
Learning objective	**Pupils should:**
a) Identify weight as a force	• know that the unit of force is the newton (N). • know that the weight of an object is caused by the Earth's gravity pulling on it.
b) Recognise that more than one force can act on an object	• understand that forces may act in opposing directions and that they are represented by the direction and size of an arrow.
c) Measure forces using a forcemeter	• make readings from a simple forcemeter (e.g. to pull a shoe along a surface). • know that friction is a force and understand that different surfaces, e.g. the tread of a shoe or a tyre, affect this force.
d) Know that water can produce an upwards force on objects	• use the term *upthrust* correctly. • know that when something floats, the upthrust balances the weight.
e) Know that unbalanced forces can change how things move	• understand that unbalanced forces can start or stop movement, speed up or slow down a moving object and/or change the direction of an object's movement.

Unit 6: How we see things	
Learning objective	**Pupils should:**
a) Recognise that shadows are formed when light is blocked	• understand the term *opaque*. • understand that the size of a shadow is affected by changing the position of the opaque object.
b) Know that reflections can be seen in shiny surfaces because light is reflected when it hits a shiny surface	• know that a mirror is an example of a surface that reflects light. • construct/interpret simple ray diagrams.
c) Know that light travels from a source and that we see light sources when light enters our eyes	• know that examples of light sources are the sun, a torch, an electric light and a candle. • construct/interpret simple ray diagrams.

Unit 7: Changing circuits

Learning objective	Pupils should:
a) Understand that a circuit needs a power source, and that a complete circuit is needed for a device to work	• use the term *cell* for the individual units of a *battery.* • identify simple connection errors in circuits drawn in 3D and/or using symbols.
b) Know that metals are electrical conductors and plastics are electrical insulators	• understand how these properties affect how metals and plastic are used in electric cables.
c) Know how to make bulbs in a circuit brighter	• understand that increasing the number of cells, or reducing the number of other components, e.g. buzzers, in a series circuit, will make a bulb(s) brighter.
d) Know how to use mains electricity safely	• understand that mains electricity poses a risk of electric shock, which may kill. • be able to identify dangers such as wet hands, poking items into sockets, bare wires and overhead cables.
e) Understand that electrical components can be represented by symbols; know the symbols for the components they use	• know the symbols for a cell, a lamp, a buzzer, a motor, an ammeter and a switch.
f) Know how to construct circuits from a circuit diagram	• recognise 3D diagrams of components drawn as symbols and vice versa.
g) Understand what a parallel circuit is, and identify some of the differences between series and parallel circuits	• understand the effect of a bulb breaking in a series circuit and in a parallel circuit. • solve simple problems relating to placement of switches in series and parallel circuits.
h) Know how the thickness of a wire in a circuit will reduce the brightness of the bulbs	• understand that it is 'harder for electricity to flow' through a thin wire than a thick wire. [Knowledge of resistance is **NOT** required].

Learning objective	Pupils should:
i) Know the effect on brightness of changing the numbers of bulbs and cells in a circuit	• understand that adding additional bulbs makes it 'harder for electricity to flow' in a series circuit. • know that adding more cells to a circuit will increase the brightness of the bulb(s). [Knowledge of voltage is **NOT** required].
j) Understand that a flow of electricity is called a current; and how to measure current	• know that current is measured in amps (A). • use the terms *current* and *ammeter* correctly. [Details of direction of current flow or wiring of an ammeter are **NOT** required].

Unit 8: Scientific enquiry

	Learning objective:	Pupils should:
Ideas & evidence in science	a) Know that science is about thinking creatively to try to explain how living and non-living things work	• suggest links between causes and effects. • suggest reasons for their observations.
	b) Know that it is important to test ideas using evidence from observation and measurement	• understand the differences between qualitative and quantitative data [these terms need **NOT** be used].
Investigative skills	c) Ask questions that can be investigated scientifically and decide how to find answers	• suggest questions to test a scientific idea and consider what evidence would be needed to answer them.
	d) Consider what might happen before carrying out an investigation	• make simple predictions based on information provided and/or knowledge from the curriculum.
	e) Know the names of simple pieces of equipment and how they are used	• use thermometers, beakers and measuring cylinders as well as other equipment as indicated in specific areas of the curriculum. • select appropriate equipment for use in an investigation
	f) Know how to conduct a fair test	• understand that only one variable should be changed; others should be controlled. • identify an example of a variable that should be controlled in a given investigation.

	Learning objective:	Pupils should:
Obtaining & presenting evidence	g) Be able to plan out simple experiments that could be carried out safely	• use simple equipment and materials appropriately, taking action to control risks • be able to identify hazards and control measures e.g. use of safety glasses.
	h) Be able to make systematic observations and measurements	• take readings from apparatus e.g. volume of liquid in a measuring cylinder or temperature reading on a thermometer. • understand the term 'accuracy'.
	i) Be able to check observations and measurements by repeating them where appropriate	• understand the term 'reliability'.
	j) Be able to use diagrams, drawings, tables, bar charts and line graphs to present data	• plot/draw or interpret data using these methods of presentation.
Considering evidence & evaluating	k) Make comparisons and identify simple patterns or associations in observations and measurements or other data	• be able to identify result(s) that do not fit the pattern. • compare two or more simple sets of data.
	l) Use observations, measurements or other data to draw conclusions	• suggest reason(s) for patterns in results. • suggest reason(s) why a particular result does not fit the pattern of the other results.
	m) Decide whether conclusions agree with predictions and/or make further predictions	• consider evidence to decide if it supports a prediction. • suggest what might happen if the experiment was conducted again with a change to one variable.
	n) Use scientific knowledge and understanding to explain observations, measurements and/or other data or conclusions	• give reasoned explanations based on pupils' own scientific knowledge and understanding.
	o) Review own work and that of others in order to describe its significance and limitations	• make practical suggestions about how their work, or the work of others, could be improved, giving reasons for their suggestions.

Assessment summary

The test is externally assessed through an examination paper lasting 1 hour.

Summary of table of assessment

Test	Paper code JSC01/01
Overview of assessment • Section A consists of 45 marks addressing, with equal weighting, life processes and living things, materials and their properties and physical processes. • Section B consists of 15 marks on scientific enquiry. • The test duration is 1 hour. • Questions target levels P1, P2 and P3.	

Levels of attainment and weightings

	% in test
P1	25
P2	50
P3	25
TOTAL	**100%**

Entering your pupils for assessment

Pupil entry

Details of how to enter pupils for this test can be found in the Edexcel *Information Manual*, copies of which are sent to all active Edexcel centres. The information can also be found on the Edexcel website: www.edexcel.com

Access arrangements and special requirements

Edexcel's policy on access arrangements and special considerations for GCE, GCSE, International GCSE, Entry Level and PLSC qualifications aims to enhance access to the qualifications for pupils with disabilities and other difficulties without compromising the assessment of skills, knowledge, understanding or competence.

Please see the Edexcel website (www.edexcel.com/sfc) for:

- the JCQ policy *Access Arrangements and Special Considerations, Regulations and Guidance Relating to Pupils who are Eligible for Adjustments in Examinations*
- the forms to submit for requests for access arrangements and special considerations
- dates for submission of the forms.

Requests for access arrangements and special considerations must be addressed to:

Special Requirements
Edexcel
One90 High Holborn
London, UK

WC1V 7BH

Assessing your pupils

The first assessment opportunity for this test will take place in the June 2012 series and in each following June series for the lifetime of the test.

Awarding and reporting

The awarding and certification of this test will comply with the requirements of the current GCSE/GCE Code of Practice, which is published by the Office of Qualifications and Examinations Regulation (Ofqual).

The Edexcel International Award in Primary Science is awarded at three levels:

- P1
- P2
- P3 (Level P3 is equivalent in standard to level S1 on the Edexcel International Award in Lower Secondary Science).

The first certification opportunity for the Edexcel International Award in Primary Science will be 2012.

Pass description

Please see *Appendix A: Levels of attainment*. To achieve an award, a pupil must demonstrate the characteristics for the level across the four attainment levels for science.

Language of assessment

Assessment of this test will be available in English only. Assessment materials will be published in English only and all work submitted must be produced in English.

Malpractice and plagiarism

For up-to-date advice on malpractice and plagiarism, please refer to the Joint Council for Qualifications *Suspected Malpractice in Examinations: Policies and Procedures* document on the JCQ website www.jcq.org.uk/

Pupil recruitment

Edexcel's access policy concerning recruitment to our qualifications and awards is that:

- they must be available to anyone who is capable of reaching the required standard
- they must be free from barriers that restrict access and progression
- equal opportunities exist for all pupils.

Prior learning

This award builds on the content, knowledge and skills developed in the Edexcel International Primary Curriculum for Science.

Progression

This award supports progression to the Edexcel International Lower Secondary Curriculum for Science.

Support and training

Edexcel support services

Edexcel has a wide range of support services to help you implement this test successfully.

Ask the Expert – To make it easier for you to raise a query with us online, we have merged our **Ask Edexcel** and **Ask the Expert** services.

There is now one easy-to-use web query form that will allow you to ask any question about the delivery or teaching of Edexcel qualifications. You'll get a personal response, from one of our administrative or teaching experts, sent to the email address you provide.

We'll also be doing lots of work to improve the quantity and quality of information in our FAQ database, so you'll be able find answers to many questions you might have by searching before you submit the question to us.

Examzone – The Examzone site is aimed at pupils sitting external examinations and gives information on revision, advice from examiners and guidance on results, including re-marking, resitting and progression opportunities. Further services for pupils – many of which will also be of interest to parents – will be available in the near future. Links to this site can be found on the main homepage at www.examzone.co.uk.

Training

A programme of professional development and training courses, covering various aspects of the specification and examination, can be arranged by Edexcel. Full details can be obtained from our website: www.edexcel.com

Appendices

Appendix A: Levels of attainment

Attainment targets set out the knowledge, skills and understanding that pupils of different abilities and maturities are expected to have by the end of each level. The targets consist of six levels of increasing difficulty across Primary and Lower Secondary Science. Level P3 in Primary Science is equivalent in standard to level S1 in Lower Secondary Science.

Each level description describes the type and range of performance that pupils working at that level should characteristically demonstrate. It is hierarchical so it is assumed that a pupil working at a particular level will demonstrate the descriptor at that level in addition to those at earlier levels.

Level	Attainment Target 1: Scientific enquiry
P1	Pupils recognise why it is important to collect data to answer questions. They can use simple sentences of text to find information. They make relevant observations and measure quantities, such as length, volume or mass, using a range of simple equipment with whole divisions. They can suggest aspects of a fair test with guidance, recognising and explaining why these aspects make it fair. They record their observations in a variety of simple ways including tally charts or in tables and bar charts where headings/axes are provided. They identify simple patterns in recorded measurements and start to provide simple explanations. They communicate in a scientific way and can suggest simple improvements to their work or that of others.
P2	Pupils suggest how to collect data to answer questions. Where appropriate they make predictions. They can use paragraphs of text to find information. They select suitable equipment and make relevant observations and measure quantities, such as length, volume or mass, using a range of equipment with fine divisions. They can design a fair test with minimal guidance, recognising and explaining what aspects make it fair. They record their observations, comparisons and measurements in a variety of simple ways. They plot bar charts where axes are not given and begin to add plot points to simple line graphs where axes and other points are given. They identify patterns in recorded measurements and can point out data that does not fit the pattern. They can communicate simple pattern statements making reference to at least one variable. They communicate in a scientific way using basic scientific terminology and can suggest improvements to experimental procedures, offering reasons such as repeating for reliability. They can suggest improvements to their work, or that of others and begin to give reasons.

Level	Attainment Target 1: Scientific enquiry
P3	Pupils suggest how to collect valid data to answer questions. Where appropriate they make predictions, supported by their scientific knowledge and understanding. They select apparatus for a range of tasks and plan to use it effectively. They begin to repeat observations and measurements with precision appropriate to the task, offering simple explanations for any differences they encounter. When an investigation involves a fair test, they identify key factors to be considered. They describe these as variables and show understanding that one variable must be kept constant. They record observations and measurements systematically and, where appropriate, present data as line graphs where at least one axis or other guidance is provided. They identify patterns in recorded measurements and can communicate simple pattern statements making reference to the relationship between two variables. They can point out data that does not fit the pattern and suggest simple reason(s). They use appropriate scientific language and conventions to communicate simple quantitative and qualitative data. They draw conclusions that are consistent with the evidence and begin to relate these to scientific knowledge and understanding. They make practical suggestions about how their working methods, or those of others could be improved, giving reason(s).

Level	Attainment Target 2: Life processes and living things
P1	Pupils can identify differences between living and non-living things. They provide simple explanations for changes in living things such as growth. They make simple observations of how an animal is suited to its environment. They understand that a habitat is a place where an organism lives and they can identify simple habitats such as water, land, air, matching these to organisms that might live there. They understand the importance of soil to plants and to burrowing animals. They identify parts of a plant such as root, leaves and seeds. They demonstrate an awareness that micro-organisms can cause disease.
P2	Pupils demonstrate knowledge and understanding of life processes and living things. They can identify factors needed by plants for growth including light, water and minerals. They make simple observations and link these to their knowledge and understanding of where plants and animals live. They use keys based on observable external features to help them identify living things. They use keys to identify soil types and understand that soil is a source of magnesium and nitrates for the plants that grow in it. They recognise that feeding relationships exist between plants and animals in an appropriate habitat, and describe these relationships using food chains and appropriate terms. They show knowledge and understanding of micro-organisms which extends to identifying helpful and harmful activities of these organisms.

Level	Attainment Target 2: Life processes and living things
P3	Pupils use their knowledge and understanding of basic life processes when they describe differences between living and non-living things. They use keys using fine discrimination to help them identify living things. They explain that different organisms are found in different habitats as a result of differences in environmental factors and that variation occurs between organisms of the same species. They understand that more complex feeding relationships exist between plants and animals in an appropriate habitat, and describe these relationships using food chains and food webs. They make predictions about the effect of environmental or population changes on food chains and food webs. They can name different types of soil. They understand the need plants have for ions such as magnesium and nitrates and how fertilizers can be used to improve growing conditions. They can suggest examples of both helpful and harmful activities of micro-organisms and interpret simple situations where precautionary measures would be taken to prevent transfer of micro-organisms, such as washing hands.

Level	Attainment Target 3: Materials and their properties
P1	Pupils recognise that some changes can be reversed and some cannot. They can name changes of state when cued with illustrations. They identify simple methods of separation such as the use of a sieve to separate gravel and water.
P2	Pupils use knowledge about some reversible and irreversible changes to make simple predictions about whether other changes are reversible or not. They describe some methods that are used to separate simple mixtures. They describe changes by using scientific terms such as dissolve and solution correctly.
P3	Pupils identify a range of contexts in which changes take place. They use knowledge about how a specific mixture can be separated to suggest ways in which other similar mixtures might be separated. They suggest ways in which changes can be controlled such as speed of dissolving. They can interpret data presented in simple tables or graphs to compare solubility of different materials such as sugar or salt. They understand the composition of emulsions and foams and can give examples of each.

Level	Attainment Target 4: Physical processes
P1	Pupils identify weight as a force and can identify the unit of weight when given a choice. They understand that shadows are formed when light is blocked. They can identify simple sources of light when given a list of suggestions. They can recognise the symbols for components of a simple circuit. They understand the dangers of electricity and can identify simple hazards.
P2	Pupils identify weight, friction and upthrust as forces and recall that the newton (N) is the unit used to measure force. They understand that different forces may be acting on an object at the same time. They can recall sources of light and understand that light is reflected from shiny surfaces. They understand that the position of a shadow is affected by changing the position of the opaque object. They can draw the symbols for components of an electrical circuit with care and use these to represent a simple series circuit. They understand the effect of a component failure such as a broken bulb in series and in parallel circuits.
P3	Pupils can indicate the direction of weight, friction and upthrust on diagrams, using arrows. They understand that forces may be balanced or unbalanced and the effect this will have on the motion of an object. They can construct and interpret simple ray diagrams. They can design simple circuits and make predictions about the effect of adding or removing components. They can predict the effects of open and closed switches in series and parallel circuits. They know that current is measured in amps(A) using an ammeter.

Appendix B: Codes

Type of code	Use of code	Code number
Cash-in codes	The cash-in code is used as an entry code to aggregate the pupil's scores to obtain the overall grade for the test. Centres will need to use the entry codes only when entering pupils for their test.	JSC01
Entry codes	The entry codes are used to: • enter a pupil for assessment. • aggregate the pupil's paper scores to obtain the overall grade for the test.	Please refer to the Edexcel *Information Manual*, available on the Edexcel website

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please visit our website: www.edexcel.com