



CHILD DEVELOPMENT

0637/12

Paper 1 Theory

May/June 2017

MARK SCHEME

Maximum Mark: 100

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2017 series for most Cambridge IGCSE[®], Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

Question	Answer	Marks
Section A		
1	The ability of the body to <i>resist infection</i> . Any variations that carry the same meaning might be awarded a mark (Maximum of 1 mark.)	1
2	The answers might include – Tooth decay is painful (1), it can prevent children from eating properly (1), it helps develop good lifetime habits (1), lost teeth can affect children's confidence (1). Max of 2 marks.	2
3	Any reasonable and correct response might be awarded a mark. Keep food in the fridge (1), wash hands before preparing food (1), keep food preparation areas clean (1), cover cuts with a plaster (1), do not sneeze or cough on food (1), keep raw meat away from foods (1), keep pets put of the kitchen (1), check that food is not spoiled (1). Max of 6 marks	6
4	Any reasonable and correct response might be awarded a mark. Baby is not satisfied after a feed (1), Baby is no longer gaining weight (1), sucking on fists (1), No longer sleeping through the night (1), shows an interest in adults eating food (1), baby is restless (1). Max of 4 marks	4
5	Answers might include – Make sure that tights or socks are not too tight (1), make sure that children's feet are dried after having a bath or shower (1), ensure that babygros are big enough (1) and not tight around the feet (1), have feet measured in a regular basis (1), have well-fitting shoes (1), only provide soft covering for children's feet who are not yet walking (1), keep toe nails short (1). Max of 4 marks. Any correct, logical answer may be awarded a mark.	4
6	Answers might include – Only children (1), children who live in a flat (1), children who have behaviour problems (1), children who have no chance to mix with other children (1), children who have few toys at home (1), children who have been abused (1), children who have special educational needs (1). Max of 4 marks . Any other logical response might be awarded a mark.	4
7	Answers might include – Not feeling tired (1), too hot (1), too cold (1), thirsty (1), hungry (1), unwell (1), uncomfortable (1), lost dummy (1), too light outside (1). Max of 5 marks. Any other logical correct response might be awarded a mark.	5

Question	Answer		Marks						
8	<table><tr><th>Area</th><th>How building blocks support development</th></tr><tr><td>Physical development</td><td>Fine motor-skills developed when picking up bricks (1) Hand eye coordination when balancing bricks (1) bending stretching when making towers (1)</td></tr><tr><td>Mathematical development</td><td>Counting the bricks (1) Measuring how tall the tower is (1) Naming the colours (1) Measuring the length of the bricks (1)</td></tr></table>		Area	How building blocks support development	Physical development	Fine motor-skills developed when picking up bricks (1) Hand eye coordination when balancing bricks (1) bending stretching when making towers (1)	Mathematical development	Counting the bricks (1) Measuring how tall the tower is (1) Naming the colours (1) Measuring the length of the bricks (1)	4
	Area	How building blocks support development							
	Physical development	Fine motor-skills developed when picking up bricks (1) Hand eye coordination when balancing bricks (1) bending stretching when making towers (1)							
	Mathematical development	Counting the bricks (1) Measuring how tall the tower is (1) Naming the colours (1) Measuring the length of the bricks (1)							
Alternative correct responses may be awarded a mark or same meaning worded differently. Total 4 marks, max of 2 per area.									

Question	Answer	Marks
SECTION B		
9(a)	Responses will only be awarded a mark where there is relevant information included in italics below. <i>Genes</i> This is <i>inherited factors</i> from parents (1), it also relates to inherited <i>conditions and disease</i> that make it more <i>difficult for children to learn</i> (1). <i>Environment</i> This is how much <i>support</i> (1), <i>stimulation and encouragement</i> (1) children have.	4
9(b)	Discussion should include factors such as – providing children with opportunities to play, giving them support and encouragement, letting them find out things for themselves, allowing them to explore their ideas, helping them to understand things using all their senses, talking to them about what is happening so they make sense of the world around them, helping them to recall what they have learnt, setting a good example. Answers must be explained and in sentences not bullet points. Maximum of 6 marks awarded where points are covered and explained.	6

Question	Answer	Marks												
9(c)	Responses might differ from those below, a mark is awarded where the response is correct, max of 2 marks per factor. <table><tr><th>Factor</th><th>How it impacts on children's intellectual development</th></tr><tr><td>Lack of opportunity to play</td><td>Children cannot test out their ideas explore and find out things for themselves (1). Without stimulation children lose interest in learning (1). Children do not develop on their skills (1).</td></tr><tr><td>Deafness/ hearing impairment</td><td>Not hearing means children cannot follow directions (1). As children cannot hear others, they miss out on social interactions (1). The children cannot hear their voices so not question when they do not understand (1).</td></tr><tr><td>Poor eye sight</td><td>Without sight, children cannot see toys and resources (1). Children become confused by not being able to see what is happening (1). By not seeing others, initiation is more difficult (1).</td></tr><tr><td>Frequent ill health</td><td>Ill health means that children do not feel like playing (1). Children miss out on having interaction with others (1).</td></tr><tr><td>Serious accident</td><td>Children spend periods of time in hospital and away from other children (1). Children who are in pain will not want to play (1). Children may experience delay in their learning as they recover (1).</td></tr></table>	Factor	How it impacts on children's intellectual development	Lack of opportunity to play	Children cannot test out their ideas explore and find out things for themselves (1). Without stimulation children lose interest in learning (1). Children do not develop on their skills (1).	Deafness/ hearing impairment	Not hearing means children cannot follow directions (1). As children cannot hear others, they miss out on social interactions (1). The children cannot hear their voices so not question when they do not understand (1).	Poor eye sight	Without sight, children cannot see toys and resources (1). Children become confused by not being able to see what is happening (1). By not seeing others, initiation is more difficult (1).	Frequent ill health	Ill health means that children do not feel like playing (1). Children miss out on having interaction with others (1).	Serious accident	Children spend periods of time in hospital and away from other children (1). Children who are in pain will not want to play (1). Children may experience delay in their learning as they recover (1).	10
Factor	How it impacts on children's intellectual development													
Lack of opportunity to play	Children cannot test out their ideas explore and find out things for themselves (1). Without stimulation children lose interest in learning (1). Children do not develop on their skills (1).													
Deafness/ hearing impairment	Not hearing means children cannot follow directions (1). As children cannot hear others, they miss out on social interactions (1). The children cannot hear their voices so not question when they do not understand (1).													
Poor eye sight	Without sight, children cannot see toys and resources (1). Children become confused by not being able to see what is happening (1). By not seeing others, initiation is more difficult (1).													
Frequent ill health	Ill health means that children do not feel like playing (1). Children miss out on having interaction with others (1).													
Serious accident	Children spend periods of time in hospital and away from other children (1). Children who are in pain will not want to play (1). Children may experience delay in their learning as they recover (1).													

Question	Answer	Marks
9(d)	The responses might differ from those listed below. Logical correct responses will be awarded a mark. For example: Jigsaw – helps children to assess size and shape to create a picture. (2) Building blocks – helps children to develop skills in estimating, prediction and cause and effect as it topples over. (2) Dolls – children use their recollection of events and imagination to create ideas and re-enact what they have seen. (2) Max 6 marks	6
10(a)	Factors shown in <i>italics</i> will gain a mark. Variations that carry the same meaning might be awarded a mark. Droplet infection is spread through <i>breathing in germs</i> from an <i>infected person</i>, e.g. through <i>coughing, sneezing etc.</i> The <i>germs enter the body through the nose mouth or sometimes eyes.</i> (total of 5 marks available) Contact – contact may be <i>direct for example through kissing</i>, touching an <i>infected person</i> or <i>indirect contact</i> such as using the <i>same towel, bed linen</i> and toys that have <i>been in contact with the disease</i>. Some <i>germs</i> (such as tetanus) are <i>found in the soil, dust or excrement</i> and cause disease when they <i>enter the body through cuts and grazes</i>. <i>Food poisoning bacteria</i> can be <i>transferred through food, water and from one person to another.</i> (total of 5 marks available)	10
10(b)	The division of marks are not awarded on an equal split as the question asks for discussion. A maximum of 10 marks will not be awarded unless both parts have been attempted. Bacteria can be found everywhere in air, soil, water, food and on plants and animals. Not all bacteria cause disease or are harmful to people. Bacteria need to enter the body to cause ill health. In the right conditions, bacteria will grow and multiply. Bacteria cause disease when they damage tissue inside the body or when they produce toxins which travel around the body and can cause harm elsewhere in the body. Viruses are smaller than bacteria. They only become active when they are inside living cells. There are many different types of virus that live in human cells. They grow and multiply which makes people unwell. The cell then explodes and the virus cells infect other healthy cells. The other cells then become damaged and diseased.	10

Question	Answer	Marks												
10(c)	Answers might vary and any correct response might be awarded a mark. <table><tr><th>Disease</th><th>Signs and symptoms</th></tr><tr><td>Chicken pox</td><td>Itchy, blistery rash that can also cause high fever and general feeling of unwell.</td></tr><tr><td>Whooping cough</td><td>This is evident through a cough with a whoop on the end, watery eyes, high fever.</td></tr><tr><td>Measles</td><td>Firstly fever and a cold, 4–5 days later a rash appears.</td></tr><tr><td>Scarlet fever</td><td>This might begin with a sore throat, fever and a bright red rash develops.</td></tr><tr><td>(also could include polio, impetigo etc.) max of 2 marks</td><td>Max of 2 marks 4 marks in total</td></tr></table>	Disease	Signs and symptoms	Chicken pox	Itchy, blistery rash that can also cause high fever and general feeling of unwell.	Whooping cough	This is evident through a cough with a whoop on the end, watery eyes, high fever.	Measles	Firstly fever and a cold, 4–5 days later a rash appears.	Scarlet fever	This might begin with a sore throat, fever and a bright red rash develops.	(also could include polio, impetigo etc.) max of 2 marks	Max of 2 marks 4 marks in total	4
Disease	Signs and symptoms													
Chicken pox	Itchy, blistery rash that can also cause high fever and general feeling of unwell.													
Whooping cough	This is evident through a cough with a whoop on the end, watery eyes, high fever.													
Measles	Firstly fever and a cold, 4–5 days later a rash appears.													
Scarlet fever	This might begin with a sore throat, fever and a bright red rash develops.													
(also could include polio, impetigo etc.) max of 2 marks	Max of 2 marks 4 marks in total													

Question	Answer	Marks
Section C		
11(a)	0–6 Low level response. The learner has not focused on the male forms of contraception. There is little awareness of what these are and no suggestion of positives and weaknesses. 7–11 Medium level response. The learner has attempted both parts of the question. There are correct responses to each part of the question, but this may be limited to one or two examples. Answers have not been explained or fully extended. 12–20 High level response. The learner has answered both parts and given several examples for each. Answers are logical and well explained. There are clear positives and negatives for each that are well-explained and factually correct. Indicative content: Male condom – this is a sheath of thin rubber or latex that is placed over the erect penis prior to intercourse. The condom is effective in preventing pregnancy and sexually transmitted disease including, HIV. The condom works because semen and sperm are collected in the end and prevented from entering the body. This means that it must be carefully removed to prevent leakage. The positives are that condoms do not need to be prescribed by a medical practitioner and are widely available. They are instant and do not need any pre-intercourse preparation. They are relatively inexpensive and cause no ill effects to the male or female. They do not affect the sexual performance of either the male or female. They are non-chemical and instantly reversed after intercourse. The negatives are that some men feel they can affect sensitivity. If not fitted correctly they may tear and become ineffective. They can be affected by lubricants that can cause them to perish. They only work if used following the directions. You must buy them in advance and have them readily to hand.	

PUBLISHED

Question	Answer	Marks
	Withdrawal – this is where the man withdraws his penis before ejaculation of sperm. This means that there is less chance of a sperm reaching the egg to fertilise it. The positives are that it is free and does not entail any chemicals or surgery. It is natural and no preparation is needed. The negatives are that it is not reliable as some sperm can escape in the semen before ejaculation. The method does not protect against sexually transmitted disease. It takes a great deal of self-control from the male. Sterilisation – this is where the man has his vas deferens tubes cut by making a small incision in the scrotal sack. This prevents ejaculation sperm travelling through the tube and into the body. Positives are that this is very reliable in preventing pregnancy and it is life-long. Therefore, it prevents the male from getting their partner pregnant forever. It does not involve any chemicals and contraception does not need to be thought about prior to intercourse. Negatives are that it involves a medical procedure, and is generally permanent. It can be expensive and causes discomfort for a short period of time. Reversal can be ineffective and expensive. It does not protect against sexually transmitted disease.	

Question	Answer	Marks
11(b)	0–6 Low level response. The responses do not take into account the question. The question has been misunderstood or is stereotypical or discriminative in content. 7–11 Medium level response. The learner has attempted both parts of the question. There are correct responses to each part of the question, but this may be limited to one or two examples. Answers have not been explained or fully extended. 12–20 High level response. The learner has answered both parts and given several examples for each. Answers are logical and well explained. There is discussion of how each factor impacts upon parenting specifically rather than broad statements. The learner has shown a good awareness of diversity. Indicative content: Language – parents might speak a home language that is different from those in the community where they live. Parents might want children to learn their home language exclusively or do not speak their community language. This means that children might find it difficult to integrate into school. Children with dual languages might be able to teach their parents. Children can become fluent in more than one language with gives them life-long skills. Food eaten – parents may chose for children to follow a certain diet, such as vegan or not eating certain foods, such as pork. This might also include only eating meats that have been killed in a certain way. Meal times might also have different traditions. Children may find it hard to know what they can eat when at parties or away from their parents. Children might not wish to follow these traditions. The children might gain a better understanding about foods and food choices. Religion – parents might teach children about their beliefs and faiths and decide that children have to follow their customs. Activities and past times might include going to places of worship. This will build children’s sense of identity and friendships with others. There might be more people to guide and support children. Children might not understand parents’ beliefs or reasons why some things are discouraged or encouraged. Dress – parents might decide to dress in a certain way, for example by covering their head. The children might be dressed in a similar way. Children might grow their hair or have it shaved off. This can be difficult for children because for them, gender can be identified by hair length. The parents might choose traditional dress for older children but allow young children to wear clothes that allow their freedom of movements. Learners might also discuss discipline, education and expectations.	