

EVERYTHING YOU NEED TO KNOW FOR GRADE 9

New 9-1 GCSE

Chapter 3: Development

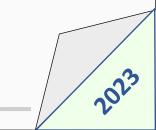
Complete Revision Guide & Practice Questions



AQA GCSE PSYCHOLOGY

The Latest 9-1 Specification Fully Covered

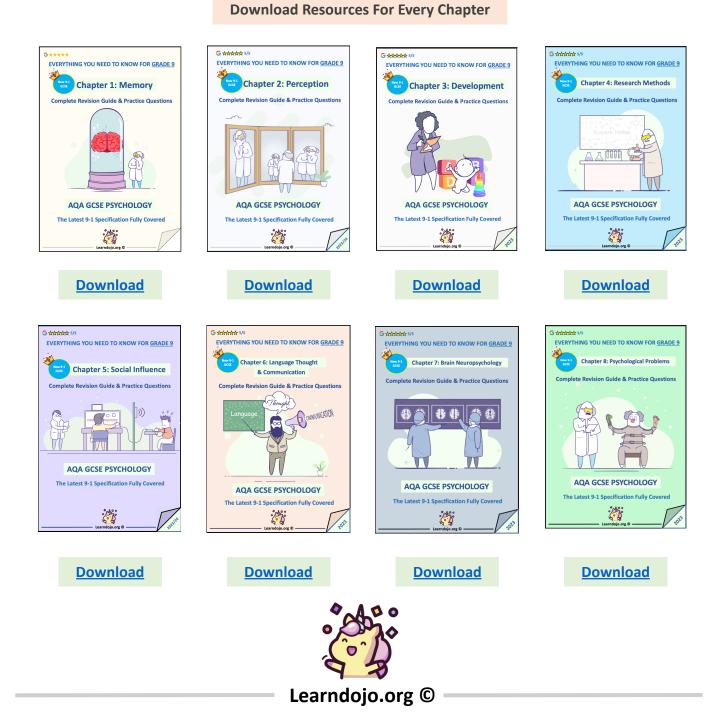


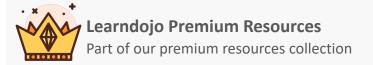


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What is development?



The development of the human brain is one of the most fascinating subjects you can study in GCSE psychology.

Humans are distinctively different from all the other animals on the planet and that is solely down to how the human brain has evolved.

Our brain and its capabilities have allowed us to learn complicated languages, communicate complex messages to one another, discover the sciences and even reach other worlds through the development of advanced technology.

No other animal comes close and this is why scientists are fascinated by how the brain works.

The development topic for GCSE psychology focuses on the **brain and its development**, its structures and also begins to introduce theories as to how we learn.

We will learn about the work of Piaget and his cognitive development theory and how this has affected education in the UK. We will also look at the effects of learning on development and Dweck's Mindset theory of learning as well as learning styles and Willingham's learning theory. What the GCSE Psychology specification says you need to learn for this section:

- A basic knowledge of brain development, from simple neural structures in the womb, of brain stem, thalamus, cerebellum and cortex, reflecting the development of autonomic functions, sensory processing, movement and cognition.
- The roles of nature and nurture.

The development of the brain **begins in the third week of pregnancy** with cells multiplying to form a structure called the neural plate. This then folds onto itself to form a tube-shaped structure called the neural tube.

During the fourth week, the neural tube starts to divide into a **spinal cord, forebrain, midbrain and hindbrain.**

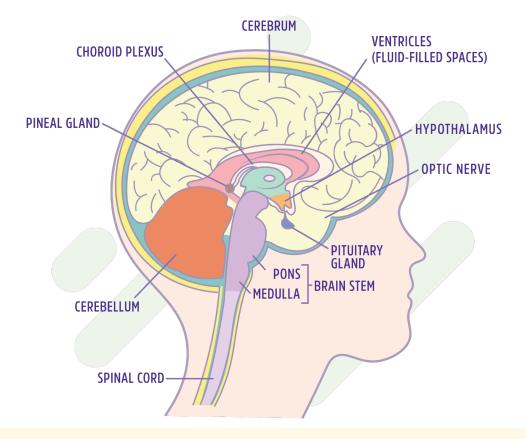
In the sixth week, the forebrain divides into two areas one of which forms the **cortex** and the other develops into the **thalamus**. Neurons and synapses begin to develop in the **spinal cord** allowing the foetus to move and react to its environment.

At the fifteenth week, the cerebellum forms the hindbrain and by the sixth month of pregnancy, the brain is fully formed although not at its full size.

The last three months see folds begin to form on the **cortex** which gives the brain its wrinkled appearance.

The brain is 25% the size of an adult brain at birth.

The Brain Stem, Thalamus and Cerebellum

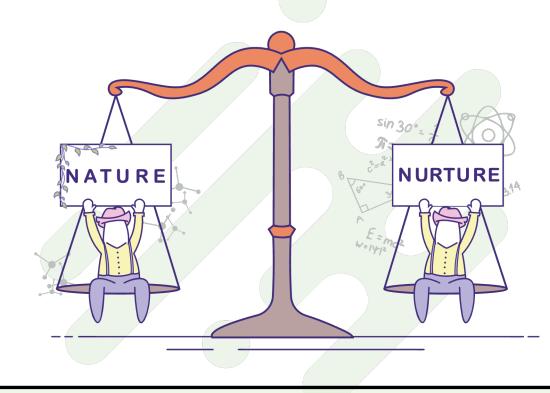


The brain stem is shaped like a widening stalk and connects the spinal cord to the brain. It controls basic autonomic functions such as breathing, heart rate, blood pressure and sleeping. At the sixth week of pregnancy, the baby's heart is beating regularly and blood pumps through the main vessels.

The thalamus is found at the centre of the brain and can be viewed as a sensory processing station. It receives messages from the senses and translates them into appropriate behavioural and motor responses. All sensory information will pass through the thalamus on its way to the cortex where cognition takes place. The cerebellum is located at the back of the brain behind the brain stem. It is responsible for coordinating movement and balance and receives information from the cortex and other areas of the brain. Once received, it will "fine-tune" this information into a motor activity such as walking.

Damage to the cerebellum can cause difficulty with muscle coordination, maintaining balance and fine motor skills i.e. difficulty typing or riding a bicycle.

The Roles of Nature and Nurture



On the nature side of the argument, psychologists believe your characteristics and behaviour are inherited from your parents while those on the **nurture** side argue that they are **influenced by the environment** and develop after birth and are shaped dependent on the individual's experience.

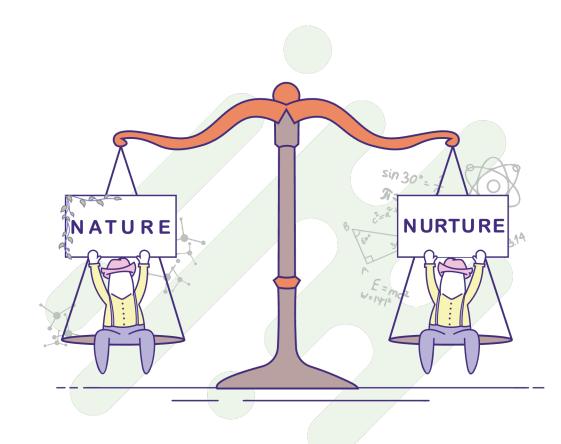
To study the effects of nature and nurture in brain development, **psychologists use twins, new-born babies as well as animals.**

Twins share exactly the same genetic makeup whereas non-identical twins do not. If identical twins are found to have similar characteristics then this is seen as evidence that **supports nature as the cause**.

Some research studies have shown that IQ between identical twins is very similar which implies nature plays a significant role in intelligence. Other research studies have found personality is also shaped by nature; one study compared the behaviours of identical twins who were raised apart.

They were found to be very similar when they met for the first time when aged 39. Both of them drove the same car, went on holiday to the same place as well as bit their nails.

This study showed some support for nature shaping personality.



Criticism:

- Twin studies can be useful however care still needs to be taken when analysing the results. Identical twins may appear to have similar characteristics and it can be easily thought to be down to nature but this may not be the case. Identical twins may be treated similarly by people such as parents or peers and therefore their behavioural similarities may be due to nurture (and being treated the same) rather than their genes.
- Identical twins also share very similar environments in their upbringing and similarities may be due to the environment rather than genetics.
 Disentangling between nature and nurture isn't therefore clear-cut.
- New-born babies are useful to study as there is little chance for nurture (environmental influences) to have impacted the child. Psychologists have found that besides being able to cry, they can also recognise faces. This would suggest that nature is responsible for these abilities. As babies are not able to talk until much later, it is believed that nurture is responsible for the development of language.



Animal studies have been used to demonstrate how nurture is important for early brain development. One study compared two groups of rats with one group having toys to stimulate them while the other did not. The results found that the rats that lived with the stimulating toys developed bigger brains and showed better problem-solving skills compared to rats living on their own without stimulation. This shows how nurture can affect brain development.

<u>Criticism:</u>

Animal studies also have their limitations as we have to be careful when we draw conclusions on human development based on the findings of animal-based studies. This is because what applies to animals may not necessarily generalise to humans because human development is very complex and could be different.

Animal studies are useful however as they allow us to conduct tests that would not be possible on humans due to ethical reasons. This can help us understand how biological mechanisms in humans may work and provide us with insights that may not have been possible otherwise.



Piaget's Stage Theory of Cognitive Development

Jean Piaget developed his stage theory of cognitive development proposing that **schemas were key to cognitive development** and developed as a child grew.

Piaget saw cognitive development as a result of two influences which were **maturation** and the **environment.**

Maturation refers to the effects of the biological process of ageing. As children age, certain mental operations become possible for them and through their interactions with the environment, their understanding of the world becomes more complex too.

Schemas

Schemas were defined by Piaget as **blocks of knowledge** that develop in response to our experiences from the world.

Piaget believed that babies were born with simple schema's for sucking and grasping and as they grew, new schemas developed. Schemas can be behavioural such as grasping an object or cognitive such as classifying objects.

The processes involved in the development of schemas was through **assimilation** and **accommodation**.

Assimilation

A child may initially try to understand new information in terms of their already existing knowledge about the world.

A baby that is given a new toy may initially try to grasp it or suck it in the same way as their rattle. Assimilation occurs when an **already existing schema** (such as sucking or grasping) is used on a new object and therefore involves the **incorporation of new information into an existing schema**.

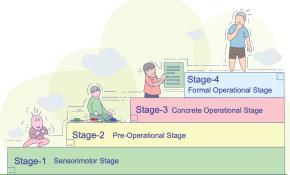
Accomodation

Accommodation occurs when a child or person adapts an existing schema in order to understand new information that does not appear to fit in with their current understanding of things.

An example of **accommodation** may be how a person who is used to driving a manual car (with gears) then must adapt to drive an automatic car.

While assimilation is **the processing of fitting new information and experiences into already existing schemas**, accommodation is the process of changing existing schemas or forming new ones when new information cannot be assimilated.

The Four Stages of Development

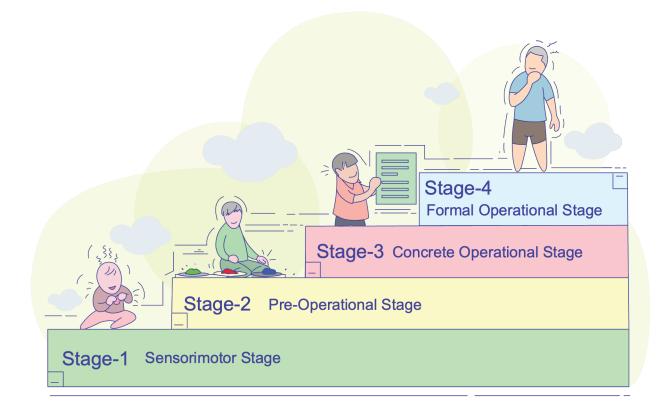


*		Stage-2 Pre-Operational Stage
		Stage-1 Sensorimotor Stage
Stage	Age	Characteristics
Stage 1: Sensorimotor Stage	0-2 yrs	The sensorimotor stage sees children learn about the world through their senses and by doing things (hence the name sensory and motor being combined to form sensorimotor). The main feature of this stage is that the child develops object permanence which is the understanding that objects still exist even when they are out of sight.
Stage 2: Pre- operational stage	2-7 yrs	The main feature of the pre-operational stages is the egocentric nature of children. Piaget investigated this by showing children a model of three mountains and then placing a doll somewhere besides the model. The child was then shown photos that had been taken from each side of the model and asked to choose the photo that represented the dolls viewpoint. Piaget found that children younger than seven years old chose a photo that showed their own viewpoint, however, children older than this tended to be able to choose the dolls viewpoint. He concluded that children are no longer egocentric from the age of seven upwards.
Stage 3: Concrete operational stage	7-11 yrs	Piaget believed that by the age of seven onwards, children developed the ability to conserve (conservation) and were acting in the concrete operational stage. Conservation means children know that the amount of something may stay the same, even if its appearance may change. To investigate conservation, Piaget showed children two identical rows of counters. He then asked the child if there were the same amount of counters in each row. When a child agreed there were, he spread out one row while the child watched and asked the question again (if there were the same amount of counters between the two rows). Children under the age of seven said there wasn't while children over the age of seven said there was.
Stage 4: Formal operational stage	11 yrs+	The main feature of the formal operational stage is that children can now solve problems in a systematic way. Piaget tested this by giving children different lengths of string and a number of weights that could be attached to the string. The child's task was to investigate what factor affected how fast the pendulum would swing and this involved the child varying the length of the string and the number of weights attached. Piaget found that children under the age of 11 would attempt to change both the weight and length of the string at the same time however after the age of 11, children would solve the problem in a systematic way. For example, they would keep the length of the string the same while they changed the weights in turn from the lightest to the heaviest. The conclusion drawn by Piaget here was that the main feature of this stage was the ability to solve problems systematically.

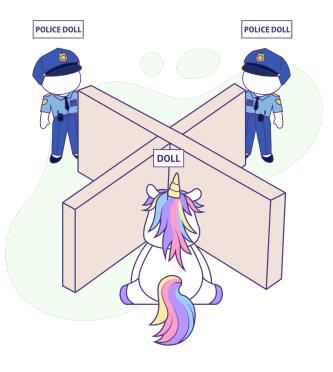
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Evaluating Piaget's Theory of Cognitive Development

- Piaget's cognitive development theory and its stages have been heavily criticised. Other
 psychologists have shown that the ages Piaget said children could learn certain tasks we're
 incorrect. More recent studies have shown how babies develop object permanence before
 eight months (Hughes "Policeman Doll" study 1978) and children can lose their egocentric
 thinking and conserve before the age of seven (McGarrigle and Donaldson's Naughty Teddy
 study 1974). There is also now the belief that children enter the formal operational stage
 much later than age 11, and some never reach this stage at all.
- Other criticisms of Piaget's theory focuses on how he conducted his experiments. For example, in the conservation tasks, he asked children the same question more than once before and after the counters had been moved. This could have resulted in researcher bias as the children may have believed that their first answer may be incorrect and so changed this.
- There is also criticism of the way Piaget collected his data. Small samples were used and a lot of research was done using his own children. Some argue small samples may be unrepresentative of most children and the questions he asked children were not standardised as each child was treated differently. Therefore the way in which the questions were asked could be a confounding variable for the results.
- Despite these criticisms, Piaget's theory has enjoyed a lot of mainstream support. His experiments were easy to replicate and his research had a major impact on early years education where his ideas are still used to this day.



Hughes Policeman Doll Study 1978



Learndojo.org - Hughes Policeman Doll Study (1978)

<u>What was the study's aim?</u>: The study was conducted to see if children are able to see things from another person's perspective at an earlier stage than Piaget's theory of cognitive development suggested.

<u>Study design</u>: The study was conducted in a laboratory where there was control over extraneous variables. All of the procedures were standardised to ensure the study could be replicated to check for reliability. Thirty children between the ages of 3.5yrs and 5yrs took part in the study.

Method: The children were shown a model with two intersecting walls that formed a cross with a policeman doll placed on the model. The child was asked to hide a "boy doll" and position it in such a way the policeman would not be able to see him. The policeman was placed in different positions on the model, and the child was then tasked with hiding the boy doll each time. If the child made mistakes, although rare, they were told of this and allowed to try again. After some trials, the actual experiment was conducted but this time with two policeman dolls with the child tasked with placing the boy doll in such a way that neither police doll could see it. The experiment was conducted three times so that a different section of the grid was left as the only hiding place each time.

<u>Results</u>: 90% of the children aged between 3.5yrs and 5yrs were able to hide the boy doll from the two policeman dolls.

<u>Conclusion</u>: The children aged between 3.5yrs to 5yrs old were able to see things from other peoples point of views when the situation was familiar to them and the task made sense. This was in contradiction to Piaget's findings that children were egocentric until the age of 7yrs.

McGarrigle and Donaldson's Naughty Teddy Study 1974

CONSERVATION TASK	ORIGINAL PRESENTATION	TRANSFORMATION
NUMBER	Are there the same number of pennies in each row?	Now are there the same number of pennies in each row, or does one row have more?
LENGTH	Is each of these sticks just as long as the other?	Now are the two sticks eually long, or is one longer?
MASS	Is there the same amount of water in each glass?	Now does each glass have the same amount of water, or does one have more?
LIQUID	Is there the same amount of clay in each ball?	Now does each piece have the same amount of clay, or does one have more?
WEIGHT	Does each of the two balls of clay weigh the same?	Now (without placing them back on the scale to confirm what is correct for the child) do the two pieces of clay weigh the same, or does one weigh more?

<u>Aim</u>: McGarrigle and Donaldson conducted a study to see if children developed conservation skills at an age that was earlier than Piaget's theory predicted if the change to the materials (counters) was accidental.

<u>Study design</u>: A laboratory setting was used where there was control over some of the extraneous variables. All procedures were standardised to ensure replicability and reliability of findings. Eighty (80) children between the ages of 4yrs and 6yrs old took part in the study.

<u>Method</u>: The children were shown two rows of counters and asked if they were the same in both rows. A glove puppet named "Naughty Teddy" was introduced and shown to "accidentally" mess up one of the rows in front of the child so the counters were spread out and the row looked longer. The experimenter pretended to be annoyed at "Naughty Teddy" and told the hand puppet off. The children were then asked if there were the same amount of counters in each row. The image above gives you an idea of the different ways this experiment has been conducted to test children on their conservation skills.

<u>**Results**</u>: 62% of children aged 4yrs to 6yrs stated that the counters remained the same in each row, therefore displaying their ability to conserve. Only 16% of children in this age range answered correctly when an adult made this change in Piaget's conservation of numbers study.

Conclusion: This study demonstrated that children younger than the age of 7yrs can conserve if they perceive the change to materials (counters) to be accidental. When they witnessed "Naughty Teddy" to spread the counters out, younger children knew the counters had not changed.

Evaluating McGarrigle and Donaldson's Naughty Teddy Study



- Other researchers have found evidence to support McGarrigle and Donaldson's findings when replicating Piaget's conservation of numbers study. In one such study psychologists asked the children only once in terms of how many counters there were and the study was conducted in complete silence. They showed children two rows of counters and then spread one row out asking the child only once "is there the same amount in each row?". This study found that more 6yr olds got the answer correct than Piaget had found demonstrating that children can conserve before the age of seven (7).
- McGarrigle and Donaldson's study can also be criticised as it involved children being tested by a stranger in an unusual environment, therefore, lacking any ecological validity or external validity to real-world situations. If the person asking the questions or the environment was familiar, more children between the ages of 4yrs and 6yrs may have shown the ability to conserve.
- McGarrigle and Donaldson's Naughty Teddy study was important as it demonstrated that children younger than the age of seven (7) could conserve which contradicted Piaget's theory. There were limitations however as over 30% of children still failed to conserve when Naughty Teddy made the changes. Subsequent replication of the study has also found similar findings although the results were not as high as McGarrigle and Donaldson's original findings.

The Effects of Learning on Development

What the GCSE Psychology specification says you need to learn for this section:

- Dweck's Mindset Theory of learning: fixed mindset and growth mindset. The role of praise and self-efficacy beliefs in learning.
- Learning styles including verbalisers and visualisers. Willingham's Learning Theory and his criticism of learning styles.

Dweck's Mindset Theory of Learning

Carol Dweck developed her Mindset Theory of Learning which attempts to explain how students can achieve success in their learning. Dweck's theory specifically links to mathematics and science although can be generalised to other subjects and sporting activities. Dweck proposed that there were two types of mindsets within individuals;

Fixed mindset and Growth mindset.

<u>Growth Mindset</u> – Individuals with a growth mindset believe their intelligence derives from hard work and can be increased by putting in more time and effort into learning.

<u>Fixed Mindset</u> – Individuals with a fixed mindset believe their intelligence is unchanging and down to genetics, therefore nothing they can do will be able to change this.

When faced with challenges, the individual's mindset will affect how they proceed to deal with it. Dweck believed that a fixed mindset would be likely to give up more quickly however an individual with a growth mindset would keep on trying, which would increase their chances of succeeding.

Evaluating Dweck's Mindset Theory

- Research has shown mixed support for Dweck's Mindset Theory. Bouchard and McGue (1981) study found a strong case for genetics playing a strong role in intelligence. This study looked at the IQ scores of people who shared various percentages of genetics and who were reared together in similar environments as well as apart.
- This meta study demonstrated that even when identical twins were reared apart, they displayed very similar IQ levels and this was stronger than siblings reared together.
- This study did, however, show differences in intelligence levels even in identical twins which lends support for environmental factors and supports Dweck's Theory.
- Gunderson's 2013 study provides support for Dweck's theory. In this double-blind study, neither the participants or the invigilator were aware of the objective. The objective was to link the type of praise a child received to their mindset (whether effort praise or achievement praise). The study showed that children who received a lot of praise were more likely to develop a growth mindset lending support to the theory.

Dweck believed that the type of praise received by students, whether positive or negative,

affected their mindset. She suggested two types of praise existed which were Person praise and Process praise.



Person praise: This would see the student praised for their intelligence i.e. if they were told they were clever, or if they were told they were a great psychologist for example.



Process praise: This would see the student praised on their efforts and the processes they used when completing a task. This could focus on the strategies used or the progress they have made.

Students who receive person praise may come to believe their success and failures are down to factors beyond their control. Alternatively, students who receive process praise may come to believe their successes and failures are due to the amount of effort they have put in.

One study looked to test this using an online maths game that students could play, which gave feedback on their effort, strategy and progress. This was different from the usual mathematical games that provided a score as feedback.

The study found that with this new game, students made more effort, used more strategies and persevered for longer than normal. The conclusion drawn was that the type of praise a student receives has a significant impact on their learning.

The Role of Self-Efficacy Beliefs in Learning

Self-efficacy is defined as the belief you have in your own ability to succeed at a task.

A student with a strong sense of self-efficacy would put in the efforts required to achieve their goals, challenging themselves with difficult tasks and are thus more likely to be successful. A student with a low sense of self-efficacy believes they will not be successful, so they are unlikely to try and therefore avoid challenging tasks which makes them less likely to achieve their goals.

Self-efficacy can be increased by students by doing the following:

- Being successful at something.
- Observing other people succeed at something due to their efforts.
- Being persuaded they can achieve by a role model such as a teacher or parent.
- By being guided through a task.

Learning Styles

Learning styles are different ways people learn and process information. According to VAK theory, there are 3 learning styles which are:

- Visual learning style,
- Auditory learning style
- Kinaesthetic learning style

Visual learners:

- Like to learn by seeing things, reading, or through pictures.
- Remember things based on what they looked like
- Prefer graphs, illustrations, photos, pictures and videos

Auditory learners:

- Like to learn by hearing/listening to things
- Like to speak out loud to aid their learning
- Prefer verbal instructions
- Like discussion-based learning
- Like to repeat things verbally

Kinaesthetic learners:

- Learn best by doing things themselves
- Prefer to get physically involved and do things first-hand
- Like to touch and feel things, move things

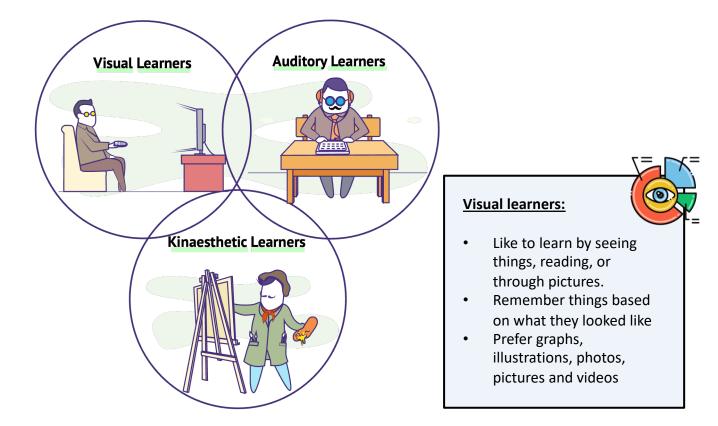
Another theory for a different type of learning style is a set of learners that are either **verbalisers** or **visualisers**:

- <u>Verbalisers</u> process information verbally preferring written information and to write things down. They will think using words.
- <u>Visualisers</u> process information in a visual way and prefer to learn from pictures and diagrams. They will think using pictures.









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People believe that if you teach a student in a way they learn best based on their preferred learning style, they should learn better.

An example of this is if you have a Kinaesthetic learner, the tutor can make sure the lesson incorporates activities instead of them being required just to sit and listen. Visual learners can be taught using pictures and diagrams to illustrate points and concepts.

Willingham disagreed with this and believed that learning styles do not exist in the ways suggested. As part of his learning theory, he pointed out that there was no experimental support for their existence or effectiveness. Other research studies have also shown that teaching in a students preferred learning style has no effect on their exam results.

Willingham agreed that visual and auditory memory may be better within students but this did not help in the classroom environment. Willingham argued this was because teachers want students to learn the meaning of things rather than what they sound or look like. Regardless of whether the information was presented visually, actively or audibly, the student still needed to extract the information and its meaning to effectively learn. This would then explain why teaching in a students preferred learning style appears to have no effect on their exam results.

A students ability to store the information is ultimately more important than how they learn this information. Willingham believed that students should be taught using the best method based on the content they were being taught.

For example, if students are being taught about the structures of the brain, all the students should see diagrams of the brain rather than only those with a visual learning style. Similarly, if students were in a language lesson, all students should hear how the words are pronounced, not just those with an auditory learning style. If a student struggled with taking in a particular form of information, they then need to be given the chance to practice dealing with that information too.

1) Research suggests that nature plays a role in early brain development.

Which of the following is a way that nature can affect brain development?

circle one answer only.

- A. Experiences with other people
- B. Genes
- C. Getting an infection
- D. Neglect

(1 mark)

2) Which of the following **best** describes the function of the cortex?

Circle one answer only.

- A. Controls basic autonomic functions
- B. Controls cognitive processes
- C. Coordinates movement and balance
- D. Passes on information from the sense organs

(1 mark)

3) Read the following information:

Megan and her dad are visiting a farm.

Megan is very excited to see the animals and shouts, "Look at the little horse, daddy. It is so cute!"

Her dad explains, "Actually it is a donkey, Megan. Although it looks very similar to a horse, a donkey has a thicker coat, longer ears and a shorter tail than a horse."

Briefly describe Piaget's concept of accommodation.

According to this concept, how will her dad's explanation affect Megan's understanding of horses? (4 marks)

Cognition and Development Paper 1 2020

4) Sienna is planning her holiday. Which part of the brain plays a key role in this activity?

Circle **one** answer only:

- 1. Brain stem
- 2. Cerebellum
- 3. Cortex
- 4. Thalamus

(1 mark)

5) Matt is looking at a drawing of how castles were designed. Which one of the following learning styles is he using?

Circle one answer only:

- 1. Fixed
- 2. Growth
- 3. Verbaliser
- 4. Visualiser

(1 mark)

6) According to Piaget's theory of cognitive development, during which stage will a child first start to look for something that has been hidden from view?

Circle one answer only.

- a) Concrete operational
- b) Formal operational
- c) Pre-operational
- d) Sensorimotor

(1 mark)

7) Two teachers are having a conversation about a student. Mr Taylor: "I am really worried about Jana. She is not enthusiastic about learning during lessons and does not complete her homework. Her test scores are getting worse. What can I do to help her?"

Mr Rogers: "Maybe you need to increase Jana's level of self-efficacy."

Outline one example of how Mr Taylor can use praise to improve Jana's learning

(2 marks)

8) Outline one example of how Mr Taylor can increase Jana's self-efficacy. [2 marks]

9) Read the following: Mason and Kyle had a trial for the school football team but were not selected to play.

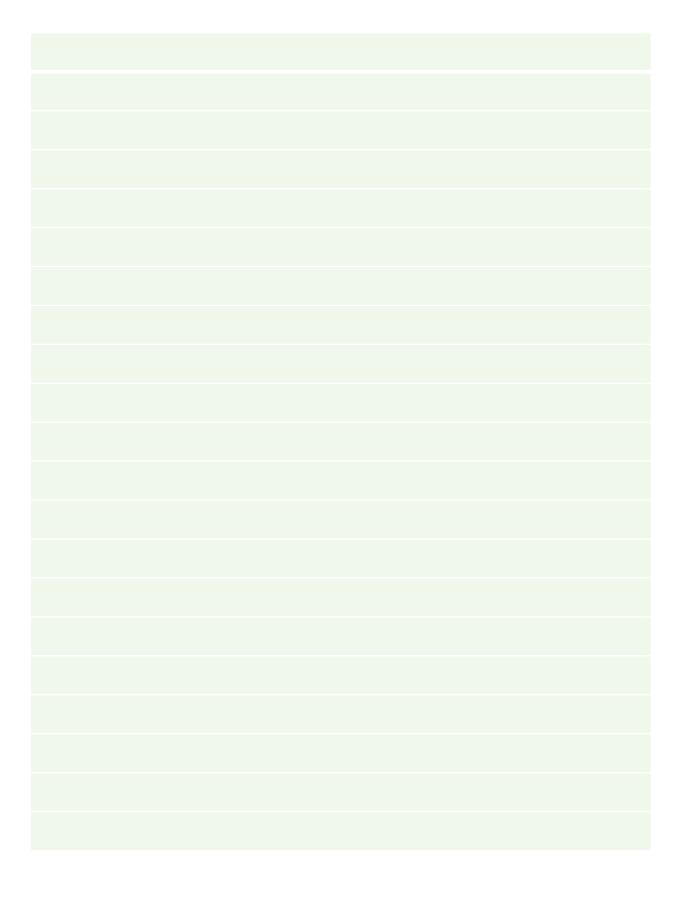
Mason: "I'm such a loser. I never get chosen for anything. There is no point going to training. The coach obviously doesn't like me. There's always going to be someone more talented than me, it's so unfair."

Kyle: "I am disappointed too but everyone gets rejected sometimes. The coach says I need to improve my fitness level so I am going to start running twice a week. Perhaps I will be selected next time."

Use your knowledge of both negative schemas as an explanation for depression and Dweck's Mindset theory of learning to explain why these two students responded in different ways.

Briefly evaluate both negative schemas as an explanation for depression and Dweck's Mindset theory. (9 marks)

(write your answer on the following page and space provided)



10) Hughes investigated egocentrism in his	'policeman doll study'. Describe this study
(4 marks)	

11) Evaluate Hughes' 'policeman doll study'. (5 marks)

12) Research suggests that nature plays a role in early brain development. Which of the following is a way that nature can affect brain development?

Circle one answer only.

- A. Experiences with other people
- B. Genes
- C. Getting an infection
- D. Neglect

13) Which of the following best describes the function of the cortex?

Circle <u>one</u> answer only.

- A. Controls basic autonomic functions
- B. Controls cognitive processes
- C. Coordinates movement and balance
- D. Passes on information from the sense organs

14) Read the following information.

Megan and her dad are visiting a farm. Megan is very excited to see the animals and shouts, "Look at the little horse, daddy. It is so cute!"

Her dad explains, "Actually it is a donkey, Megan. Although it looks very similar to a horse, a donkey has a thicker coat, longer ears and a shorter tail than a horse."

Briefly describe Piaget's concept of accommodation. According to this concept, how will her dad's explanation affect Megan's understanding of horses? **(4 marks)**

15) Read the following information.

Four-year-old Ibrahim and his auntie go to a café for a drink. His auntie buys two cartons of apple juice which are identical in size. She pours Ibrahim's carton into a tall narrow glass. She pours her own carton into a short wide glass. Ibrahim says to his auntie "I have got more juice than you".

Briefly describe Piaget's concept of conservation. Refer to Ibrahim in your answer. (4 marks)

16) McGarrigle and Donaldson box investigated conservation in the 'naughty teddy study'.

Describe and evaluate this study (6 marks)

17) You have been asked box to compare the effects of using different learning styles to revise the structure of the brain. Describe how you would design an experiment to do this. You need to include:

- 1. The tasks participants would be asked to do to revise the structure of the brain using a verbaliser and a visualiser learning style
- 2. one example of a standardised procedure that you would use and a justification for why this should be used.
- 3. One ethical consideration you would need to address and how you would deal with this.

(6 marks)

18) Willingham has criticised the use of learning styles.	
Driefly outline his criticism of learning styles	
Briefly outline his criticism of learning styles	(3 marks)
	· · ·
19) Which of the following best describes the function of the brain stem?	

Circle <u>one</u> answer:

- A. Controls basic autonomic functions
- B. Controls mental processes
- C. Coordinates movement and balance
- D. Processes sensory information

(1 Mark)

20) Which of the following best describes the function of the brain stem?

Circle <u>one</u> answer:

- A. Controls basic autonomic functions
- B. Controls mental processes
- C. Coordinates movement and balance
- D. Processes sensory information

(1 Mark)

21) What is meant by 'Learning Styles'?

(1 Mark)

22) Vicky is a verbaliser. Describe <u>two</u> ways in which Vicky could revise for a History test using this learning style.

1.

2.

(4 Marks)

23) Read the following information.

Ella and Jake are playing hide and seek. Eight-year-old Ella hides under her bed and is completely hidden. Jake, who is only five, hides behind a short curtain, so his legs can still be seen.

Use Piaget's theory of cognitive development to explain the different hiding behaviours of Ella and Jake.

(6 Marks)

24) Briefly evaluate Piaget's theory of cognitive development.

(4 Marks)

25) Describe and evaluate	Willingham's	learning theory.
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Revision Timetable	Mon	Tues	Weds	Thurs	Fri	Sat	Sun	Subject or topic
9am								
10am								
11am								
12pm								
1pm								
2pm								
3pm								
4pm								
5pm								
6pm								
7pm								
8pm								
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