In the human lifespan, there are six life stages. You should know the names of each life stage and what ages each stage covers.

1. Infancy (0-2 years)
2. Early childhood (3-8 years)
3. Adolescence (9-18 years)
4. Early adulthood (19-45 years)
5. Middle adulthood (46-65 years)
6. Later adulthood (65+ years)

This photo shows Jake with his grandparents. Complete these sentences to show the current life stage of each person.

(a) Angie is in the ……………………… life stage.

(b) Jake is in the ……………………… life stage.

(c) Geoff is in the ……………………… life stage.

Ewan is 15 years old. He lives at home with his family and goes to the local school. He enjoys playing chess in his spare time.

Which life stage is Ewan in?

A  Early adulthood
B  Infancy
C  ✓ Adolescence
D  Middle adulthood

Make sure you learn the exact age ranges for each of the six life stages. In your test you might need to choose the correct life stage for a person of a given age.

Now try this

This photo shows Jake with his grandparents. Complete these sentences to show the current life stage of each person.

(a) Angie is in the ……………………… life stage.

(b) Jake is in the ……………………… life stage.

(c) Geoff is in the ……………………… life stage.
UNIT 1

Learning aim A

Aspects of development

GROWTH and DEVELOPMENT are changes that individuals experience through the life stages. There are FOUR key aspects of growth and development.

1. **Physical development** – growth and other physical changes that happen to our body throughout life

2. **Intellectual/cognitive development** – the development of language, memory and thinking skills

3. **Emotional development** – the ability to cope with feelings about ourselves and towards others

4. **Social development** – the ability to form friendships and relationships and to learn to be independent

**PIES**
The word **PIES** will help you to remember the four aspects of development:
- **Physical**
- **Intellectual**
- **Emotional**
- **Social**

**Worked example**

Nadeem was bullied in his last year at school. He is due to start college soon, but is worried because he now finds it difficult to socialise with other young people. Identify two aspects of Nadeem’s development that have been most affected by bullying. 

1. His emotional development.
2. His social development.

**Now try this**

Baby Brad is 6 months old. His mother, Alexa, has taken him to the baby clinic for his six-month check-up. The photo opposite shows him being weighed. Which aspect of Brad’s development is the nurse checking? (1 mark)
Growth and physiological change

The term growth describes an increase in height and weight. Growth continues until EARLY ADULTHOOD. The term physiological change describes the physical changes that take place throughout the life stages.

Key changes

1. **Infancy/early childhood**
   - Children grow rapidly and develop many physical skills.

2. **Adolescent**
   - The body continues to develop. There may be GROWTH SPURTS. Bodies will change as they reach SEXUAL MATURITY.

3. **Young adult**
   - The body has reached PHYSICAL MATURITY.

4. **Older adult**
   - The AGEING PROCESS begins in middle adulthood.

**Key terms**

- **GROWTH SPURTS**: periods of fast growth
- **SEXUAL MATURITY**: when an individual’s reproductive organs are fully matured
- **PHYSICAL MATURITY**: when an individual reaches their full height and the peak of physical fitness
- **AGEING PROCESS**: by about 65, individuals will have lost some strength and muscle tone

**Worked example**

Ben is 15 years old. In the last year he has grown rapidly and is now 175 cm tall. Ben is fit and active, and he is the fastest sprinter in his year group at school.

1. At what life stage will Ben reach his full height?
   - **A** ✓ Early adulthood
   - **B** Infancy
   - **C** Adolescence
   - **D** Middle adulthood
   - **(1 mark)**

2. At what life stage will Ben begin the ageing process?
   - **(1 mark)**

Ben will begin the ageing process when he reaches the middle adulthood life stage.

**Now try this**

Give one example of physical growth and one example of a physiological change. **(2 marks)**
Gross motor skills

Gross motor skills allow infants to control large muscles in the body to enable them to crawl, walk and run, for example.

Activities that promote gross motor skills
- Hopscotch
- Digging
- Riding a bike
- Playing catch
- Climbing frames
- Ride-on toys
- Push-and-pull toys

Stages of gross motor skills development

It is important that you know the sequence of gross motor skills development, because you will need to suggest suitable activities for infants and children of different ages.

**Infants develop their gross motor skills from the head down.**

1. They gradually control muscles in their neck and then their back so that they can roll, sit and crawl.
2. The muscles in their legs and feet develop so that they can stand and then walk.
3. In early childhood, the large muscles continue to develop to help coordination and balance.

**Worked example**

Explain two ways in which playing in the playground will help children’s gross motor skills development.

(4 marks)

1. **In this type of play, children will hop, run and climb.** This will help them to develop strength and control because they are using the large muscles in their legs.
2. **The children will develop coordination because they are using their whole body, arms and legs to help them to climb.**

**Now try this**

Just describing what children do in a playground – for instance, climbing – will not answer this question fully. This answer also explains the motor skills, such as muscle strength and coordination, that children develop as they play.

1. **Identify two examples of gross motor skills that infants are developing at 12 months.** (2 marks)
2. **For each gross motor skill, give one example of an activity that could be used to develop that gross motor skill.** (2 marks)

Complete the table below.

<table>
<thead>
<tr>
<th>Gross motor skill</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fine motor skills

Fine motor skills allow infants and young children to control and coordinate their hands and fingers.

**MANIPULATING**
At first, babies use their whole hand to manipulate objects. By 12 months, they are starting to use the small muscles in their fingers.

**GRIPPING**
By one month, babies can grasp an adult’s finger. By three months, they can grasp a rattle for a short time.

### Examples of fine motor skills

**HAND–EYE COORDINATION**
This child is able to use the muscles in her fingers to pick up the construction piece and use her eyes to guide her finger movements.

### Activities that promote fine motor skills

Knowing how children develop their fine motor skills is important, as it will help you to identify suitable activities for children of different ages.

<table>
<thead>
<tr>
<th>Fine motor skill</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gripping</td>
<td>• Playing with a rattle</td>
</tr>
<tr>
<td></td>
<td>• Holding a small toy</td>
</tr>
<tr>
<td></td>
<td>• Feeding self with spoon</td>
</tr>
<tr>
<td>Manipulation</td>
<td>• Building with blocks</td>
</tr>
<tr>
<td></td>
<td>• Playing with toy farm animals</td>
</tr>
<tr>
<td></td>
<td>• Playing musical instruments</td>
</tr>
<tr>
<td>Hand–eye coordination</td>
<td>• Playing with jigsaw puzzles</td>
</tr>
<tr>
<td></td>
<td>• Writing</td>
</tr>
<tr>
<td></td>
<td>• Sewing</td>
</tr>
</tbody>
</table>

Some actions might use more than one type of fine motor skill. An alternative answer could be that Kia will use manipulation when she fastens her buttons.

### Worked example

Kia is 4 years old. She is becoming independent and likes to dress herself for school.

Give two examples of the fine motor skills that Kia might use when dressing herself. (2 marks)

1. Kia will use hand–eye coordination when she fastens the buttons on her cardigan.
2. Kia will use her hands to grip when she pulls on her boots or does up the fastenings on her shoes.

### Now try this

Which phrase best describes the term fine motor skills? (1 mark)

A. The development of movement in the large muscles in arms and legs
B. How development progresses from simple to more complex actions
C. The development of movement of the small muscles of the fingers and hands
D. How children grow and develop their physical skills
Physical development in adolescence

Adolescence is the life stage between the ages of 9 and 18 years.

Puberty
During adolescence, young people experience a period of change called PUBERTY. This starts when the brain releases chemicals called HORMONES.

**Changes to primary sexual characteristics**
PRIMARY SEXUAL CHARACTERISTICS are present at birth. Examples include the ovaries, vagina, testes and penis. They are necessary for reproduction. During puberty, hormones cause the sexual and reproductive organs to mature.

**Changes to secondary sexual characteristics**
SECONDARY SEXUAL CHARACTERISTICS appear during puberty. They are caused by changes to the height and shape of the body, and distinguish the two sexes. Examples are the female breasts and facial hair for males. Secondary sexual characteristics are not necessary for reproduction.

Reaching new heights
During the adolescence life stage, a young person’s height can increase rapidly over a short period of time – this is known as a growth spurt.

Primary and secondary sexual characteristics

<table>
<thead>
<tr>
<th>Male sexual characteristics</th>
<th>Female sexual characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY</td>
<td>PRIMARY</td>
</tr>
<tr>
<td>• Penis enlarges</td>
<td>• Uterus and vagina grow</td>
</tr>
<tr>
<td>• Prostate gland produces secretions</td>
<td>• Ovulation and menstrual periods begin</td>
</tr>
<tr>
<td>• Testes enlarge and produce sperm</td>
<td></td>
</tr>
<tr>
<td>SECONDARY</td>
<td>SECONDARY</td>
</tr>
<tr>
<td>• Growth of facial hair</td>
<td>• Enlargement of breasts</td>
</tr>
<tr>
<td>• Growth of armpit hair/pubic hair</td>
<td>• Growth of armpit hair/pubic hair</td>
</tr>
<tr>
<td>• Increased muscle and strength</td>
<td>• Increased fat layers under the skin</td>
</tr>
<tr>
<td>• Growth spurt</td>
<td>• Growth spurt</td>
</tr>
<tr>
<td>• Voice box (larynx) grows so the voice deepens (breaks)</td>
<td></td>
</tr>
</tbody>
</table>

**Worked example**
Identify two primary and two secondary sexual characteristics that a boy will develop during puberty.

(4 marks)

**Primary sexual characteristics**
1. Penis enlarges
2. Testes produce sperm

**Secondary sexual characteristics**
1. Voice breaks
2. Hair grows in the armpits

**Now try this**
Explain the difference between primary and secondary sexual characteristics.

(2 marks)
Physical development in adulthood

People reach physical maturity at about 19, as they reach early adulthood. During middle adulthood, they begin the ageing process.

### Stages of development in adulthood

<table>
<thead>
<tr>
<th>Life stage</th>
<th>Physical characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early adulthood</strong></td>
<td>• Physically mature&lt;br&gt;• Reach full height and strength&lt;br&gt;• Have developed sexual characteristics and are able to reproduce&lt;br&gt;• Women are at their most fertile</td>
</tr>
<tr>
<td><strong>Middle adulthood</strong></td>
<td>• Begin to show signs of ageing, such as greying hair&lt;br&gt;• Begin to lose muscle tone and strength&lt;br&gt;• Body shape may change with an increase in weight&lt;br&gt;• Men may notice hair loss&lt;br&gt;• For women menstruation ends, they are no longer able to have children</td>
</tr>
<tr>
<td><strong>Later adulthood</strong></td>
<td>• Ageing process continues with further strength and muscle loss&lt;br&gt;• Stamina reduces&lt;br&gt;• Mobility (gross motor skills) and dexterity (fine motor skills) become more difficult&lt;br&gt;• May experience some loss of hearing and eyesight</td>
</tr>
</tbody>
</table>

### Menopause

The MENOPAUSE is experienced by women. It can begin at any time during middle adulthood and may take several years. PHYSIOLOGICAL (or physical) changes during menopause include the gradual ending of menstruation and shrinkage of the sexual organs. Symptoms include hot flushes and night sweats.

### Worked example

Peter is 69 years old. He is retired. He used to play football for a local team but now just watches rather than taking part.

Explain two possible effects on Peter's physical development at his life stage. (4 marks)

1. Peter may become tired more easily because he has less stamina.
2. He may no longer have the strength needed to play football because he has lost some of his muscle tone.

The word ‘because’ shows that you are explaining the effects on his physical development.

### Now try this

Give two characteristics of physical maturity. (2 marks)
UNIT 1 Learning aim A

Intellectual development

Intellectual/cognitive development is about how individuals organise their ideas and make sense of the world around them.

PROBLEM SOLVING – needed to work things out and make predictions about what might happen

MORAL DEVELOPMENT – needed for reasoning and making choices about how to act towards self and others

LANGUAGE DEVELOPMENT – essential to organise and express thoughts

ABSTRACT THOUGHT and CREATIVE THINKING – essential for thinking and discussing things that can’t be observed

MEMORY – essential for storing and recalling information

Marie is 65 years old and has just retired. Her job required her to come up with solutions to problems and think creatively, so she is worried that her ability to problem-solve and her memory may decline.

Which two of the following activities would be most effective in promoting Marie’s intellectual development? (2 marks)

A  Joining a reading group
B  Meeting up with friends regularly
C  Learning a foreign language
D  Joining a keep-fit class
E  Taking up gardening

Neil is 45 years old. He works full time as a bricklayer. He has just begun a part-time photography course at his local college.

Explain two positive effects of attending the course on Neil’s intellectual development. (4 marks)

1 Neil will develop creative thinking skills, because he will need to plan ways to take and improve his photographs.
2 Neil will have to develop problem-solving skills, because he will need to work out how to use the camera and download his photographs.

When you are asked to explain something, always write in full sentences rather than just listing ideas.

Stages of intellectual development

1 Infancy and the early years are stages of rapid intellectual development.
2 Intellectual development continues throughout the life stages.
3 Thinking skills and short-term memory may decline in later adulthood.
4 Older people may experience dementia, which is an illness affecting the brain that causes memory loss.

NOW TRY THIS

Marie is 65 years old and has just retired. Her job required her to come up with solutions to problems and think creatively, so she is worried that her ability to problem-solve and her memory may decline.

Which two of the following activities would be most effective in promoting Marie’s intellectual development? (2 marks)

A  Joining a reading group
B  Meeting up with friends regularly
C  Learning a foreign language
D  Joining a keep-fit class
E  Taking up gardening
Language development

Language development is needed for thinking and learning.

Stages of language development

<table>
<thead>
<tr>
<th>Life stage</th>
<th>Age range</th>
<th>Characteristics of language development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infancy</td>
<td>0–3 months</td>
<td>• Makes mouth movements at 6 weeks&lt;br&gt;• Responds by gurgling&lt;br&gt;• Cries to ask for food or comfort</td>
</tr>
<tr>
<td></td>
<td>6–12 months</td>
<td>• Understands some words such as 'bye bye'&lt;br&gt;• Makes sounds such as 'ba ba' or 'ga ga'&lt;br&gt;• Can give an object when asked</td>
</tr>
<tr>
<td></td>
<td>18 months</td>
<td>• Uses a small number of words (about six to ten) to communicate&lt;br&gt;• Repeats what others say&lt;br&gt;• Can follow instructions</td>
</tr>
<tr>
<td></td>
<td>2 years</td>
<td>• Can link two words together (for example, 'mine car')&lt;br&gt;• By 2 and a half years, knows about 200 words</td>
</tr>
<tr>
<td>Early childhood</td>
<td>3 years</td>
<td>• Speech is clearer&lt;br&gt;• Uses simple sentences&lt;br&gt;• Begins to ask questions</td>
</tr>
<tr>
<td></td>
<td>4 years</td>
<td>• Speaks in sentences&lt;br&gt;• May use incorrect form of word such as 'I goed'</td>
</tr>
<tr>
<td></td>
<td>8 years</td>
<td>• Develops independent reading skills&lt;br&gt;• Uses complex sentences&lt;br&gt;• Can reason and explain</td>
</tr>
<tr>
<td>Adolescence</td>
<td>9–18 years</td>
<td>• Continues to develop vocabulary&lt;br&gt;• Uses language to discuss abstract ideas; for example, using imagination to explore new ideas</td>
</tr>
</tbody>
</table>

Opportunities for promoting language development

- Play with puppets
- Watch and listen to other children
- Take part in group activities (cooking or water play)
- Play imaginatively (shopping or home play)
- Take part in group projects
- Discuss ideas

Infants need to:
- Join in with action rhymes and songs
- Share picture books

Young children need to:
- Share stories and rhymes
- Play word games and riddles

Adolescents need to:
- Read a wide range of books and materials

Worked example

Jack is 2 years old. He is looked after at home by his mother, Patricia. She is planning to take Jack to a playgroup for two mornings each week.

Give two examples of expected language development for Jack. (2 marks)

1. Jack will know around 50 words.
2. Jack will be linking together two words.

Now try this

Patricia hopes that the staff at the playgroup will be able to help Jack with his language skills.

Identify two activities that the playgroup staff could use to help Jack to develop his language skills. (2 marks)
Moral development

Moral development is about the values that individuals develop.

**Years**

- **Infancy (0–2 years)**
  - Infants are egocentric
  - Follow basic rules; take turns; share; comfort other children if distressed

- **Early Childhood (3–8 years)**
  - Begin to see other's points of view; understand fairness and right and wrong; understand rules

- **Adolescence (9–18 years)**
  - Understand fairness; develop own values; develop own understanding of right and wrong; question values of others; understand rules but may break them

**Key term**

**Egocentric**: can only see the world from their own viewpoint

**Understanding rules**

- Infants (0–2 years) are not able to understand rules, but are beginning to learn how to behave by watching others.
- Children (3–8 years) can understand rules and often remind others of how they should act.
- Adolescents (9–18 years) begin to question rules that they feel are not fair.

**Worked example**

Identify the usual age at which children start to recognise distress in others.

A ✓ 3 years
B □ 4 years
C □ 6 years
D □ 8 years

Older children will also comfort friends who are distressed, but this question asks you to identify the life stage when children start to do this.

You may notice that around the age of 3 years, children will try to comfort other children or even adults who are upset.

**Now try this**

Ajay is 7 years old and is starting his third year of school. At the beginning of the term, his teacher asked him and his friends to discuss and agree the rules for behaviour in the classroom.

Give one possible effect of discussing the class rules on Ajay's moral development.