

## Childhood: Physical development

The rate of growth during childhood is steady. Children grow stronger and become more agile.

### Gross Motor Skills

#### By...

- 3 years most children can climb stairs properly.
- 4 years gross motor skills have improved and children can stand, run and walk on tiptoe. Their core skills have improved and they should be able to catch, throw, bounce and kick.
- 6 or 7 they can ride a bike and their stamina will be increasing. They will have more ability to climb, manoeuvre and run fast during team games.



## Childhood: Physical development

The rate of growth during childhood is steady. Children grow stronger and become more agile.

### Gross Motor Skills

#### By...

- 3 years most children can climb stairs properly.
- 4 years gross motor skills have improved and children can stand, run and walk on tiptoe. Their core skills have improved and they should be able to catch, throw, bounce and kick.
- 6 or 7 they can ride a bike and their stamina will be increasing. They will have more ability to climb, manoeuvre and run fast during team games.

How is this different to infancy? What gross motor skills does an infant have?



## Fine Motor Skills

- By 4 years fine motor skills are also rapidly improving.
- Children can control pencils and can thread a string of small beads.
- Hand-eye co-ordination improves and children begin to show the ability to manipulate small objects.



How is this different to infancy? What fine motor skills does an infant have?



## Physical development: adolescence

**Puberty** is the time when your body begins to change from a child's body into an adult.

- For girls, puberty usually begins between the ages of **10 and 13**
- Boys also experience puberty although they're usually a little older when their body begins experience their changes; between the ages of **12 and 15**.
- Over the next few slides, we are going to look at the key physical changes in both boys and girls.

## Physical development: adolescence

### Female:

- Pubic hair grows
- Period start (menstruation)
- Breasts develop
- Shape changes
- Hips widen
- Become taller - growth spurt
- Gain weight

### Male:

- Facial hair grows
- Pubic hair grows
- Penis and testicles develop - penile erections occur and testes produce sperm
- Larynx (voice box) grows, causing the voice to deepen (break)
- Become taller - growth spurt
- Gain weight
- Become more muscular

## Physical development: adolescence

Physical changes of characteristics can be classified as primary or secondary sexual characteristics

### Primary sexual characteristics:

- These characteristics are present from birth but do not mature until sex hormones are released
- These characteristics are essential for reproduction
  - Ovulation in girls
  - The enlargement of testicles and the production of sperm in boys

### Secondary sexual characteristics:

- These are physical characteristics and signs that indicate the change from childhood towards adulthood
- They are not a necessary part of the reproductive system
  - One of the first signs for girls is the development of breasts
  - One of the first signs for boys is the growth at the base of the penis or pubic hair

## Physical development: early adulthood

Early adulthood is often a time of physical fitness in men and women.

Women are most fertile at this time and many have children in their 20's and 30's. Fertility can begin to decline as women and men reach the end of this life stage.

Towards the end of this life stage people may notice a gradual decline in strength and stamina. Changes in physical appearance may also be seen; for example:

- Ø Putting on weight (sometimes referred to as middle-aged spread)
- Ø Hair may start to turn grey
- Ø Males may start to loose their hair.

## Physical development: early adulthood

Case study: Jessica Ennis-Hill

Dame Jessica is one of the UK's most successful Olympic athletes, winning gold in the heptathlon in 2012, and silver in 2016.

She gave birth to her first child in 2014.

<https://olympics.com/en/video/athlete-evolution-jessica-ennis-hill>

**Can you describe, using key words, how Jessica reached her physical peak in 2012, and why she started to decline physically as she aged? Write this in your exercise book under Early Adulthood: Physical**

## Physical development: middle adulthood

Describe how we change physically during middle adulthood, using the images below:



Write this in your exercise book under Middle Adulthood: Physical

## Physical development: middle adulthood

Menopause:

<https://www.youtube.com/watch?v=up0vjSrcljQ>

Davina McCall is a TV presenter who has campaigned to raise awareness of the menopause, which can be life-changing for many women.

Can you identify three symptoms of the menopause? Write this under your previous activity

**Challenge:** Can you explain what is happening physically during the menopause?

## Physical development: later adulthood

In later adulthood cell and tissue repair is slower and major body systems don't work as well.

### Older people:

- Are more likely to get ill
- Take longer to get better
- Take longer to do things.

Older people should do as much exercise as possible to help stop their body functions from getting worse. E.g. the cardiovascular, muscular-skeletal and nervous systems.

Write this in your exercise book under  
**Later Adulthood:**  
**Physical**

Slower reaction time

Reduction in stamina

Loss of muscle

Higher risk of disease/illness

The effects of ageing in later adulthood

Weakening of bones

Reduction in senses - hearing, sight, taste

Thinning and less elasticity in skin

## Physical development: later adulthood

<https://www.youtube.com/watch?v=Ax3YN53gFEs>

Early childhood v later adulthood: what are the key physical differences?

Make a list on your whiteboards of at least five physical effects of ageing.