

Human development and reproduction in the Primary Science Curriculum

Science Year 5 Programmes of study

Animals, including humans

Statutory requirements:

To describe the changes as humans develop to old age

Notes and guidance:

Pupils should draw a timeline to indicate changes in the growth and development of humans. They should learn about the changes experienced in puberty.

LA: Pupils can describe the changes as humans develop to old age

Growing up – understanding your body changes



Ground rules

Do not be shy. Ask me anything, I am here to help

No shouting out: raise hands

Speak one at a time

Listen to each other

Respect each other by not laughing at others contribution to the sessions

No personal questions to be asked (see me after/use the “ask it basket”)

What do you want to know?

**What are you worried
about?**



**What will
we learn
about
today?**

What puberty is

How our bodies will change
during puberty

How our feelings change
during puberty

The importance of keeping
clean and personal hygiene

Puberty Re-cap

Puberty is when a child's body begins to develop and change as they become a young adult. During this time, bodies and emotions change.

You may notice these changes beginning around age 12, but it can occur anytime between the ages of 8-14.

One important thing to REMEMBER is that everyone is different, they will start & finish at different times

What physical changes happen during puberty?



Check

True or false?

Everyone starts **puberty** at 12 years old.



True



False

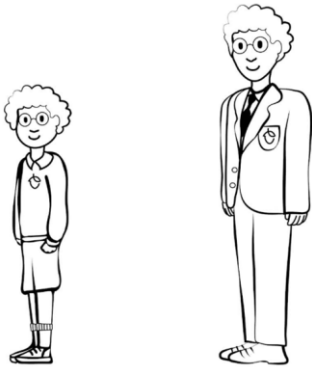


Why?

Puberty usually starts between the ages of eight and fourteen. However, it is common for people to start earlier or later than this.

During **puberty**, both female and male bodies physically change.

Here are some changes they will both experience:



growing taller



body hair



body odour



Hormones in the body can make skin and hair oily during **puberty**.

This can lead to spots, called acne.



These are common and will eventually go away with time.

What physical changes happen during puberty?



Check

What do **both** females and males experience during **puberty**?

a

an increase in body hair



b

wider shoulders and broader chests

c

growing taller



d

stronger body odour



BOYS: Where to expect changes



What physical changes happen during puberty?



It's important to know the scientific names for our private parts (**genitals**).

This can help us if we need to tell a trusted adult something we are worried about.

It can also help us when we visit the doctor.

What physical changes happen during puberty?



Check

The scrotum is a soft sack of skin that _____ the testicles.

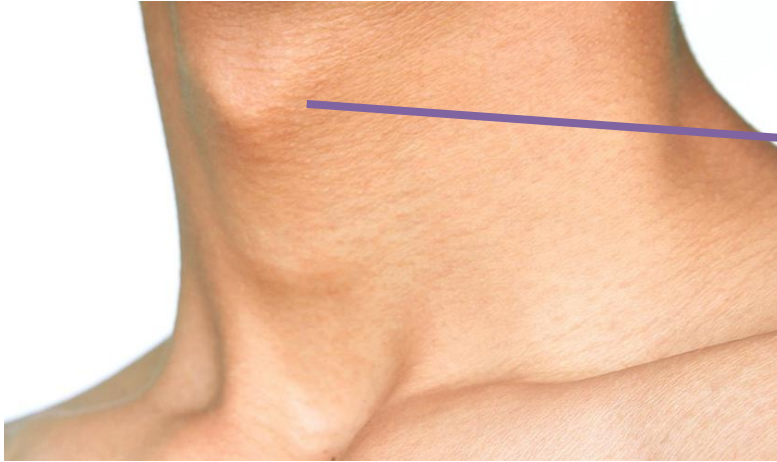
a supports

b protects



c hides

What physical changes happen during puberty?



Males will develop an 'Adam's Apple'.

This is the voice box growing larger, allowing their voice to become deeper.



Jacob

This change will happen over time.

What physical changes happen during puberty?



Males' voices can go through phases of being high or low-pitched. This is referred to as your voice 'breaking'.

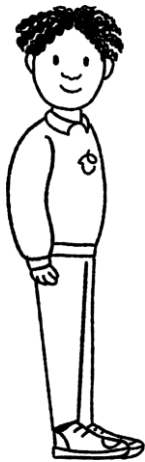
Sometimes the pitch can change suddenly or unexpectedly. This is common and nothing to be embarrassed about.



Izzy

What physical changes happen during puberty?

Males' shoulders will also become wider and their chests broader.



before **puberty**

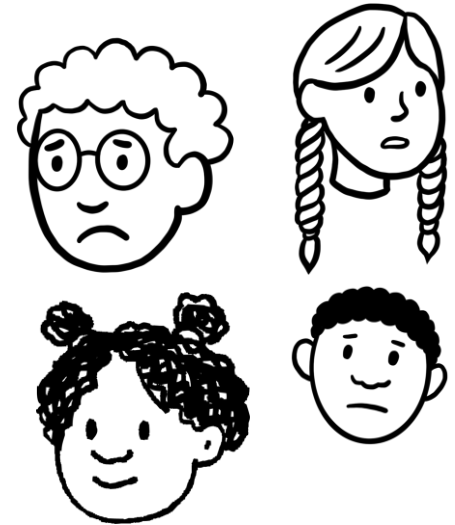


during **puberty**

During **puberty**, everyone will experience **emotional** changes as well as **physical** changes.

This is because of chemicals, called **hormones**, that change the way we feel about things.

Hormones can make us feel lots of different **emotions**.



During **puberty**, **emotions** can be felt intensely and change rapidly. It can feel like an **emotional** rollercoaster!





Emotions can be heightened in **puberty**. That means they can feel stronger and change rapidly.

People may deal with new stresses and experiences, which can make it harder to regulate **emotions**.

When **emotions** are heightened, people may feel more sensitive.

Others may think they're overreacting.

However, their feelings are valid and still matter.



Jacob

Try to remember that **emotions** are only temporary and you will soon return to your normal self.

Changing the way we keep clean

As we have discussed puberty causes many body changes and this may have an impact on your personal hygiene.

Sweating: What can help?

- Shower or bath daily, use antiperspirant or deodorant, clean clothes every day.

Skin/spots: Teenagers produce more natural oils which can lead to spots

• What can help?

- Have a bath/shower and wash your face everyday with soap or cleanser to remove these oils.

Feet: Poor foot hygiene can cause smelly feet

• What can help?

- Wash your feet at the end of everyday, wear socks made of natural fibres such as cotton or wool.
- Change your socks every day.

Changing the way we keep clean

As we have discussed puberty causes many body changes & this may have an impact on your personal hygiene

Hair: During puberty your hair produces more oil.

- **What can help?**

- Wash your hair twice a week, brush or comb your hair every day.

Teeth: Good dental hygiene is important to keep your teeth & gums healthy & prevent bad breath

- **What can help?**

- Clean your teeth twice a day with fluoride toothpaste, change your toothbrush every 3 months, visit your dentist for regular check ups

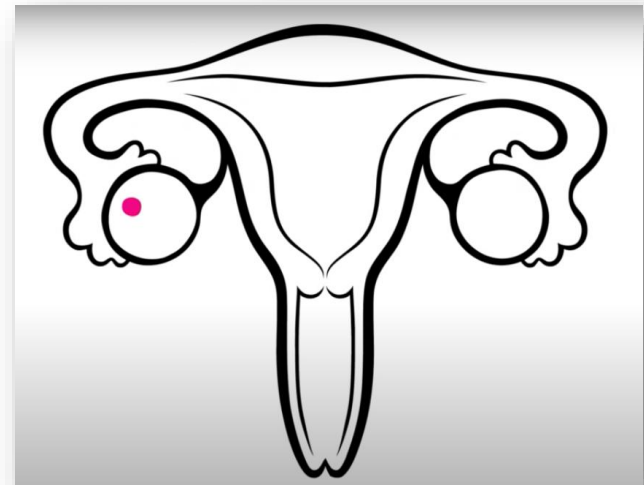
Nails: Biting your nails can damage the skin around the nail, lots of germs are found under fingernails which can cause stomach upsets or infections

- **What can help?**

- Wash your hands frequently, especially before & after food & after going to the toilet,
- Clean your nails, keep your nails well cut or filed

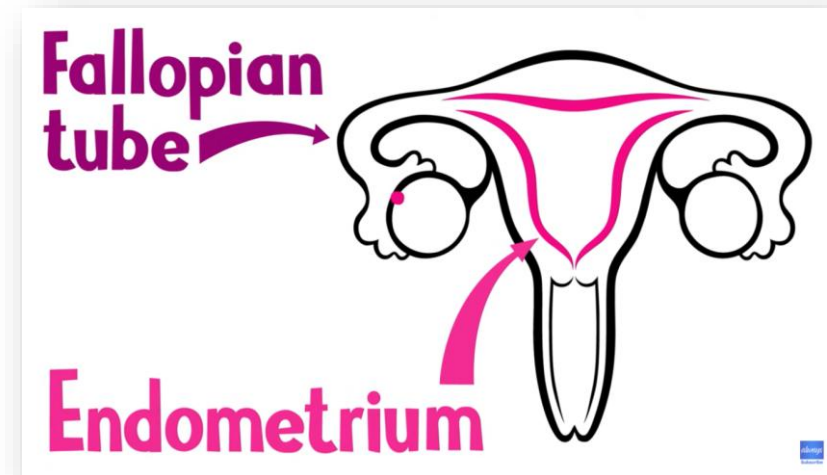
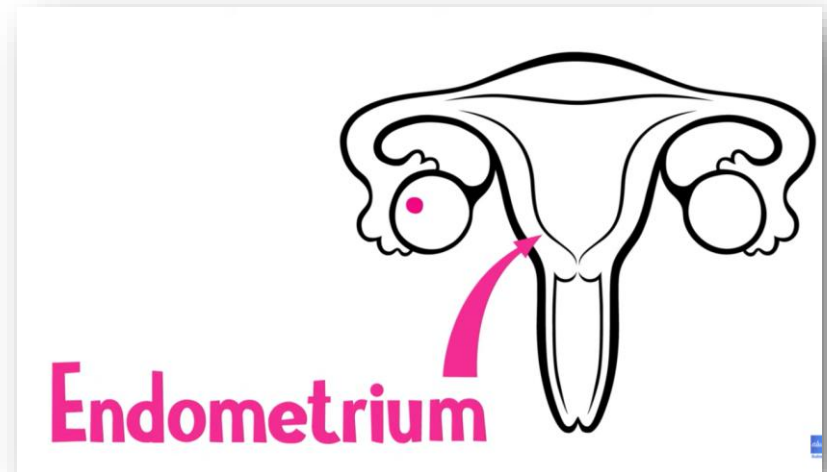
Menstruation

- On reaching puberty, girls will start to have periods because of their reproductive system. This will allow them to get pregnant once they are adults.
- Each month, their bodies produce hormones which causes an egg, in one of their ovaries (girls have two ovaries), to mature and ripen.



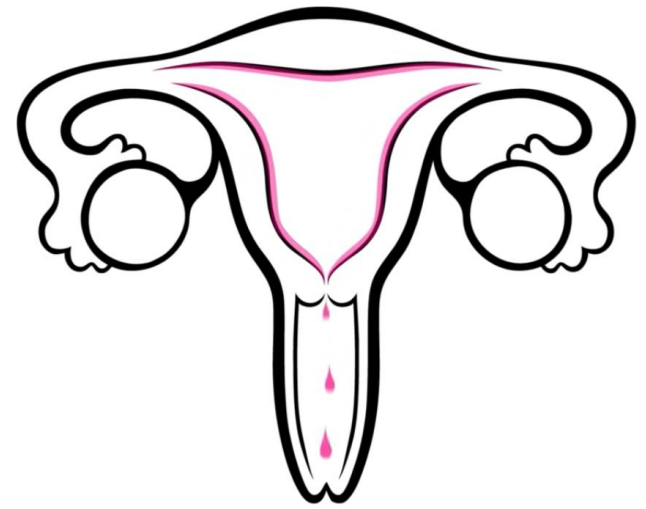
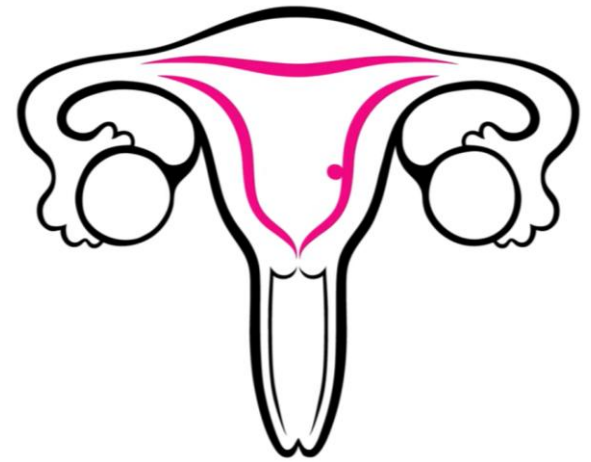
Menstruation

- At the same time, the lining of the uterus called the endometrium begins to thicken. The uterus is the place where a baby would grow.
- When the egg is fully mature, the ovary releases it into the fallopian tube and it travels towards the uterus.



Menstruation

- If the egg is fertilised by the male reproductive cell (called the sperm) while it is in the fallopian tube, the egg will attach to the endometrial lining on the inside wall of the uterus.
- Most of the time, however, the egg is not fertilised by the sperm so the endometrium isn't needed.
- The endometrium and unfertilised egg leave the body through the vagina.



Menstruation

When girls and women shed this blood and tissue, it is called menstruation or “having a period”.

A period usually lasts approximately 5 days. This cycle is repeated every 28 days.

About 3 tbps of blood will be lost so sanitary products are used to help maintain hygiene.

Is there such a thing as 'normal' puberty?



Jacob

There is no single, 'normal' way to experience **puberty**.

Changes can happen at anytime, and in different orders and speed.



Izzy

Some people can feel **insecure** during **puberty**.

This means they can feel unsure about themselves or worried about what others think.



Laura

It's important to be respectful and consider how other people are feeling during this time.

Is there such a thing as 'normal' puberty?



Sometimes the media or society can make people feel like they should look or feel a certain way during **puberty**.

For example, someone might believe that everyone starts puberty at age 12, because they saw it online.

In reality, everyone's journey is **unique**.

There is no right or wrong way to experience **puberty**.

Which statements are **true**?

a

Most people experience **puberty** the same way.

b

There is no single, normal way of experiencing **puberty**.



c

Changes can happen in different orders and speed.



It's important to speak to a trusted adult if you are worried or have questions about **puberty**.

When I started **puberty**, I spoke to my older brother who reassured me that these changes were normal.



Andeep



Laura

My teacher recommended me some books which helped me understand periods better.

Is there such thing as 'normal' puberty?



Check

True or false?

Some people can feel **insecure** during **puberty**.



True



False

Why?

Some people might feel unconfident when their body changes in **puberty**. They might feel that they should look a certain way to fit in, however, physical changes are normal and happen to everyone.

Puberty usually begins between the ages of eight and fourteen - not everyone starts at a certain age.

It is important to know the scientific names for our private parts (**genitals**) so that we can tell a trusted adult if we are worried about something.

People can feel **insecure** about the way their body is changing during **puberty**.

However, there is no 'normal' way to experience **puberty**, everyone's journey is unique.



Questions?