

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 anything I am here to help.

No shouting out: raise hands

Speak one at a time

Listen to each other

Respect each others' opinions

Contribute to the sessions

Any personal questions that you may have will be answered at the end and there is an “ask it basket” to add any further questions.

What do you want to know?

**What are you worried
about?**





**What will
we learn
about
today?**

What puberty is and why it happens

How our bodies change during puberty

How our feelings change during puberty

What periods are and why we have them



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.

For most girls, puberty occurs between the ages of 8 and 14.

One important thing to REMEMBER is that everyone is different. Puberty will start and finish at different times

What physical changes happen during puberty?



Check

True or false?

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



True



False



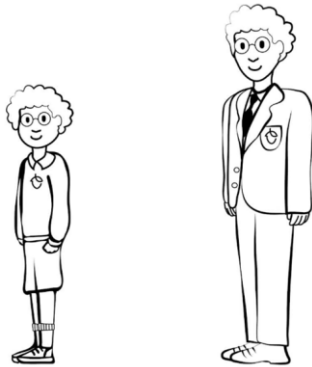
Why?

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

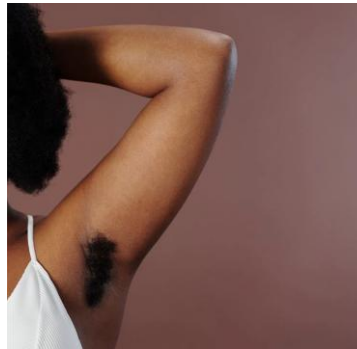
What physical changes happen during puberty?

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

Here are some changes they will both experience:



growing taller



body hair



body odour

What physical changes happen during puberty?



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



GIRLS: What to expect 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.

Private parts (Genitals):



Vulva is the word for all of the female **genitals** on the outside of the body.

The **vagina** is a passage inside the body that connects the external genitalia to internal genitalia.

Periods

How long will it last?

- Usually between 3-8 days but everyone is different

How much blood will I lose?

- About 3 tablespoons full, may be slightly more or less

How often will I get my period?

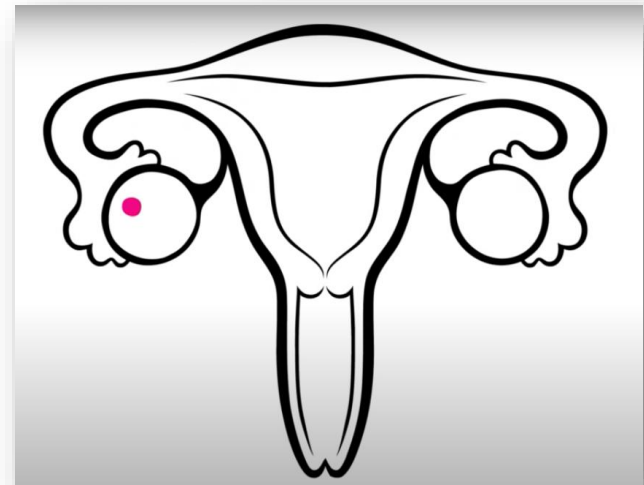
- At first there may not be a pattern to when you get your period, some women never have a regular cycle. For most women the menstrual cycle lasts 28 days.

Will it hurt?

- Some girls may get stomach cramps before & during their period

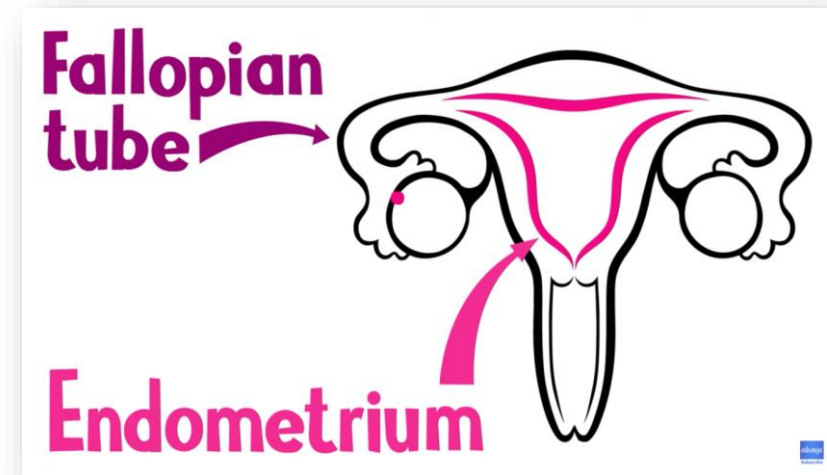
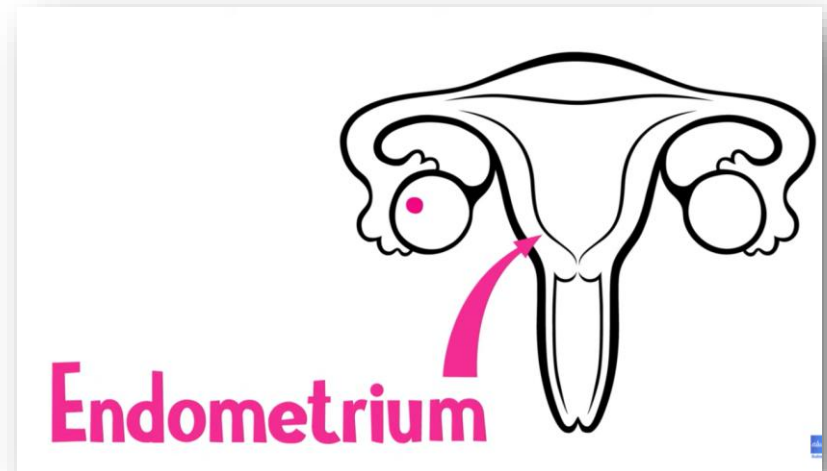
Menstruation

- 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.



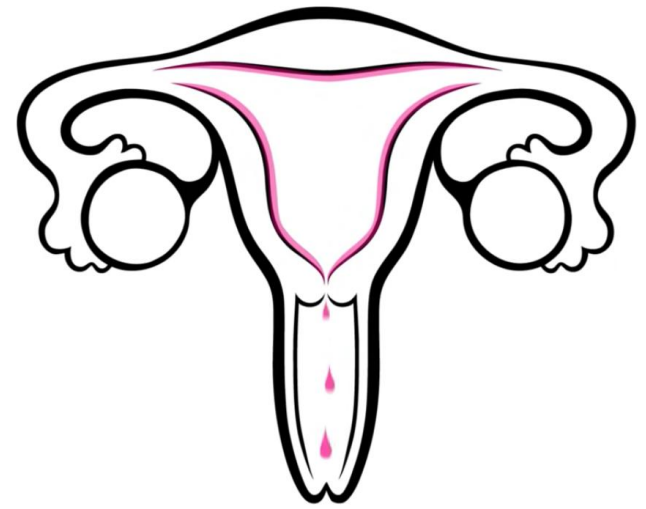
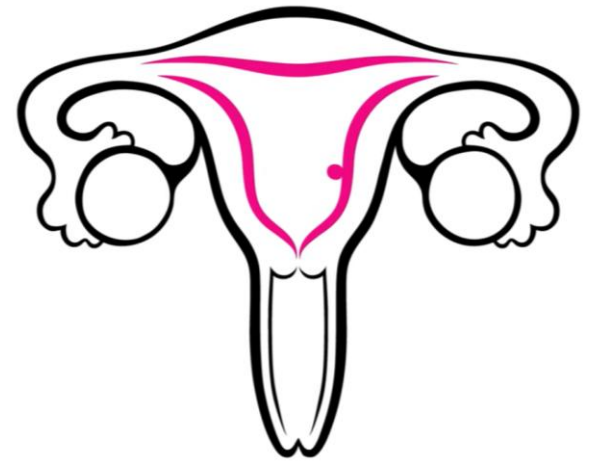
Menstruation

- 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.



Sanitary protection

Sanitary Towels (night and day)



Tampons



During your Period

01

Have a wash
every day

02

Change your
sanitary pads
every 3-4 hours

03

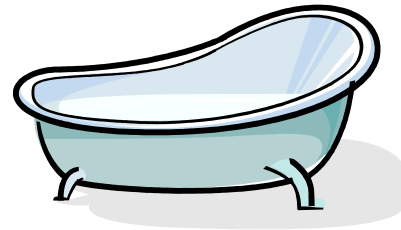
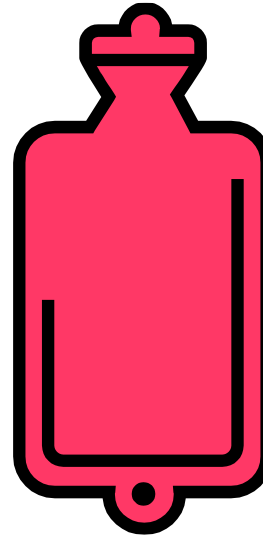
Keep spare
pants and
sanitary pads in
your bag

04

Keep a monthly
diary

What can help?

- Have a warm bath
- Massage your stomach
- Have a nice warm drink
- Use a hot water bottle or use a heat pad
- Eat a well-balanced diet
- Exercise
- Painkillers (talk to you parents)



Pre-Menstrual Syndrome (PMS)

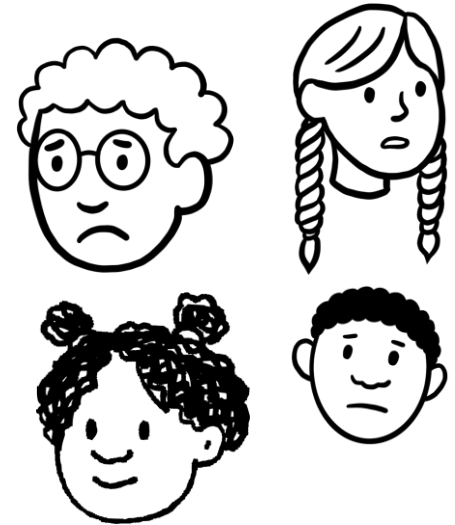
- **PMS** - the physical, emotional & behavioural symptoms that can occur in the **two weeks** before your period



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 & this may have an impact on your personal hygiene

Sweating

Sweat doesn't smell but the bacteria attracted to sweat causes it to smell

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 this 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 sock and air your shoes outside.

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 finger nails, 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

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.

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?