# Growing Up



# Background information for primary teachers

This resource discusses the bodily changes that occur during puberty, conception, how babies grow in the uterus and how they are born.

#### Introduction

The Growing Up resource has been designed to introduce Personal Development and Relationships to pupils in year 5 and 6 in accordance with Welsh Government Sex and Relationships Education in Schools, Circular 019/2010, and the Personal and Social Education Framework 2008:

#### Learning Outcomes

At the end of the series of lessons, Year 5 and 6 pupils should understand:

- the reasons for the physical and emotional changes which take place during puberty, including conception, pregnancy and birth,
- the range of their own and others' feelings and emotions,
- the importance of personal safety,
- they need to take increasing responsibility for keeping the mind and body safe and healthy,
- what to do or to whom to go when feeling unsafe.

Personal and Social Education Framework (2008)

The booklet provides guidance on how to work through the resource and offers ideas in order to ensure that personal development and relationship is effective in the school.

It is suggested that parts of the *Sense* CD 'Growing Up and Keeping Safe' Unit 'Being Healthy' section 'Puberty' and 'Sex' are shown as you present some units of the 'Growing Up' programme. This will provide additional information for pupils and will aid discussion.

A handbook can be created for every pupil from documents included in Section 15. A completed pupil copy would constitute good evidence to be included for the Healthy Schools Scheme assessment. There is also an option for the pupils to take the handbook, or parts of it, home in order to encourage discussions with parents/carers.

It is possible to change the language from Welsh/English by clicking on the face symbol in the top left corner of each slide. It is also possible to move backwards and forwards to the choices section by clicking on the house symbol .

Extended lesson ideas have been included within this booklet in order to embrace literacy and numeracy skills.

The resource is split into 14 sections:

Section 1 - Grid (KWL part 1)

Section 2 - Myself as a baby

Section 3 – Inside the body

Section 4 – Puberty changes

Section 5 - Periods

Section 6 - A loving relationship

Section 7 - Reproductive organs

Section 8 – Conception

Section 9 – Development of the baby

Section 10 – Mum keeping the baby healthy

Section 11 – The birth

Section 12- Feeding the baby

Section 13 - Changing responsibilities

Section 14 - Grid (KWL part 2)

Section 15 – Additional documents

#### Section 1 - Grid (KWL)

Success Criteria –

The pupils will:

• demonstrate what they know already and identify their own learning outcomes.



Print the document from Section 15, Number 3 — Know and Want to Know. The grid is used to gather information at the beginning of the Sex and Relationships Education lessons about what the pupils know already and what they want to know. Use the writing pen symbol to provide examples on the screen.

# Section 2 - Myself as a baby

Success Criteria –

The pupils will

- gather information from their parents/carers about themselves when they were a baby.
- identify similarities/trends among themselves as babies in respect of their development.



Print the document from Section 15, Number 4 — Myself as a baby. Ask the pupils to take the worksheet home so that they can gather information about themselves when they were a baby. Offer examples on the screen by using the pen symbol.

The aim of the activity is to gather information about the pupils' childhood and to encourage discussion at home. The information gathered should be useful for teachers at the end of the programme when discussing the birth and feeding the baby.

#### Caution

Some families may not have baby photographs available for various reasons e.g. if a child is in foster care or is an adopted child. You can ask the pupils to complete the worksheet about any member of the family i.e. brother, sister, mother or father. Do not use this worksheet if there are concerns about a child in the class.

# Extended Activity

**Numeracy** - data collection, sort the information gathered and organise the data in order to create a graph with the headings: Date of birth, Birth weight, I was born in, Hair colour, Feeding, I had my first tooth when I was, I crawled when I was, I walked when I was.

- 1. Use data to calculate what fraction and/or percentage of pupils were born in different months, born at home/hospital, fed by Mother's milk/bottle fed.
- 2. Are the heaviest babies the tallest children? Looking for patterns. Line the pupils in order of the tallest and the shortest.

**Oracy** - discuss how everybody is different and the choices that parents make are different.

This activity will offer information for further discussion relating to the birth Section 11 and feeding the baby in Section 12.

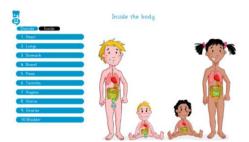
# Section 3 –Inside the body

Success Criteria –

The pupils will:

- understand that most major organs are the same for everyone,
- recognise the differences between male and female,
- understand that sexual organs become active during puberty.

Science — before you introduce the work on inside the body, ask the pupils to find out what are the main organs of the body, what are their relevant sizes, what is the function of each organ, why are they important. Include the sexual organs.



Pictures are shown of a male and female baby as well as a 10-year-old male and female child. The purpose of this activity is to show that everybody is the same except for the sexual organs and that all babies are born with these organs.

Click on the 'Inside' tab to show the internal organs. Click on the left hand tabs to see the enlarged images. Discuss the organs and their functions.

### Explain the functions of the organs:

**Heart** — is a muscle that pumps blood around the body. The blood collects oxygen from the lungs and takes it to all parts of the body.

**Lungs** — we breathe oxygen into the body and exhale carbon dioxide out through the lungs. Air comes in through the nose or mouth into the lungs. The left lung is slightly smaller than the right lung, allowing room for your heart.

**Stomach** – the stomach prepares the food for the digestive system.

**Colon** — the colon gathers the nutrients from the food that we eat. The nutrients are then carried to all parts of the body by blood cells. The digestive tract includes the mouth, oesophagus, stomach, liver, pancreas, small intestine, large intestine, rectum and anus.

**Penis** – an organ to pass urine and sperm.

**Testicles** — two soft balls inside the scrotum, this is where sperm is produced.

**Ovaries** - these produce the female's hormones oestrogen and progesterone. Between 1-2 million tiny eggs are stored in the ovaries.

**Womb** – the organ that causes periods. This is where babies grow until they are born.

**Vagina** — the inside part of a female's body that links the womb with the external part. Babies are born through the vagina.

Bladder – this is where urine is held until it is time to empty.

Additional illustrations of internal organs when using the floor mat are available in Section 15, Number 5 - Extra artwork.

**Brain** - the brain is like a powerful computer and it is the centre of the human nervous system. The brain controls our thoughts, movements, memories and decisions. The brain contains billions of nerve cells that send and receive information around the body.

The brain is divided into two sides and each side of the brain controls the opposite side of the body i.e. the left side of the brain controls the right side of the body and the right side of the brain controls the left side.

The brain is protected by the skull, a protective cover made up of 22 bones that are joined together. The adult brain weighs around 1.5 kg and it is protected by a special fluid that acts like a cushion.

Bones — are part of the skeleton and it gives the body shape. An adult's body has 206 different bones and it helps protect organs such as the brain, heart and lungs. The skeleton is able to move and bend with the attached muscles and joints.

The largest bone in the body is the femur (top of the leg) and the smallest bone is in the ear. Blood cells are produced by bone marrow inside large bones.

**Muscles** — make everything in the body move - arms, legs, feet, eyes, nose, tongue etc. They allow us to chew food, stand, walk, sit, run and play. There are more than 600 muscles in the body and they are made out of stretchy cells and fibres. The largest muscle is the one we sit on.

**Kidneys** - are two bean-shaped organs approximately the same size as our fists. They are located in the middle of the back on either side of the spine, just below the rib cage. Kidneys keep the volume of water in the body constant, remove waste from the body, regulate blood pressure and make blood.

The kidneys filter the waste out of the blood around 400 times a day. The waste is then removed from the body in urine. Urine flows from the kidneys to the bladder where it is stored until the body needs to get rid of it.

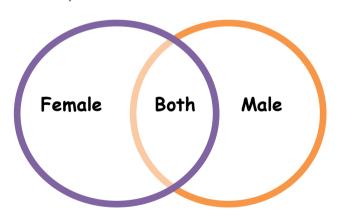
**Liver** - is the largest organ in the body and it has many purposes. The main ones are - to clean the blood, to produce the important digestive liquid called bile and to store energy in the form of sugar.

The liver sorts out the good things that the body needs and removes the waste from the food and drink we eat. This waste leaves our body when we go to the toilet.

# Extended activity -

i. (for the more able pupils) Show the pupils a variety of information ranking strategies e.g. Venn Diagram, Fish Bone Diagram, Mind Map, Diamond 9 Ranking, Odd One Out, Fortune Lines, Jig-saw. Ask them to choose the most suitable strategy in order to sort out which organs belong to the male/female/both.

ii. (for the less able pupils) You may assist them by choosing the Venn Diagram strategy. Ask the pupils to write which organs belong to the female in the purple circle, the male organs in the orange circle and write down which organs belong to both in the overlap.



#### Section 4 – Puberty changes

Success Criteria –

Pupils will understand:

- the reasons for the physical and emotional changes which take place during puberty,
- the range of their own and others' feelings and emotions.

In order to contribute towards providing information and to aid discussion, it is suggested that you show sections from the *Sense* CD "Growing up and Keeping Safe". Section 'Being Healthy', Unit 'Puberty' - "What is puberty?", "What happens to boys during puberty?", What happens to girls during puberty?" and show the video clip of the various changes.



The aim of this activity is to discuss the physical changes which occur during puberty.

Discuss the various physical changes. Ask the pupils if the changes are relevant to the girl or the boy or to both. The teacher/pupils can move the various pictures on the interactive board and place them on the girl or boy.

# Additional Information

#### Hormones

Hormones are released into the body and as a result the adolescent changes begin. Hormones are chemicals that are produced by the body in order to help it change. Puberty is a natural part of growing up and it happens to everybody. Girls usually start puberty between 8 and 13 years old and boys begin between 10 and 15 years old. Hormones have several effects on the body:

#### Acne and sweating more

Hormones cause the body to sweat more and make the skin greasier. This can sometimes cause pimples/spots or acne. The body sweats more therefore, it is important to keep the body clean by having regular baths or showers.

#### Hair growing on the body

Hair starts to grow in new places, on the face, under the arms, on arms, legs and around the pubic area. Initially the hair grows thin and light but in time it becomes darker and thicker.

#### Changing feelings (mood swings) / mixed feelings

Not only do the hormones change the body on the outside, they also change the way one feels inside. These hormones can cause 'mood swings'. A person may feel happy, embarrassed, moody, over sensitive and shy; they might start quarrelling with family members or friends.

These different emotions and mixed feelings can be confusing. The brain is trying to adjust to the hormones in the body. It is important that someone is able to talk to somebody they can trust if they feel unhappy or worried about anything.

# The growing body

The body grows taller, widens and the arms and legs grow longer.

Girls — girls' breasts start to develop. Most girls will wear a bra as their breasts grow bigger in order to give them support. Their hips widen as they get older, this is to prepare the body in case they have a baby in later life.

**Boys** — the testicles and penis grow bigger and the testicles start to produce sperm. Muscles start to develop on boys' bodies.

The penis often becomes hard during adolescence. The term for this is an erection. Blood is continuously pumped around the body but sometimes more blood goes into the penis and this causes it to harden and stand out from the body. This often happens during puberty, but, as boys grow older they are able to control it.

Sometimes boys have an erection and ejaculate whilst asleep this is called a wet dream. Ejaculation occurs when semen, which is a mixture of sperm and other bodily fluids, spurts out of the penis. This is normal and is a way in which the body prepares for when it is older.

#### Section 5 - Periods

Success Criteria –

Pupils will understand:

- the monthly period cycle
- the various sanitary products and their disposal

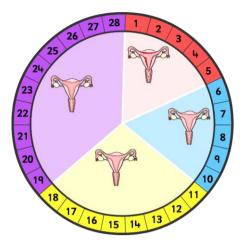
A girl's monthly period usually begins at around the age of 12. Some girls will start sooner and some later. A delay in starting periods isn't usually anything to worry about.

During a girls' monthly period cycle an egg is released from one of the ovaries every month, this is called ovulation. The egg travels from the ovary along the fallopian tube towards the uterus. The uterus prepares for the egg every month by creating a thick lining that is soft and spongy. If the egg reaches the uterus without being fertilized, the egg and uterus lining pass out through the vagina in the form of blood and this is called a period. During a female's lifetime, 400-500 eggs can be released and most of these will pass out of the body.

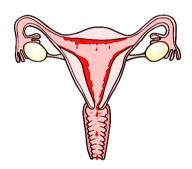
A period usually lasts approximately 5 days. Bleeding is usually heavier in the first 2-3 days and it will be red in colour. On lighter days, it may be pink, brown or black in colour. The amount of blood lost during a period is around (75ml - 180ml) 5 to 12 teaspoons full, although some may bleed more heavily than this.

Most girls' period cycles last 28 days. That is, from the first day of a period until the first day of the next period. This can vary. Some girls may have a period every 24 days and others may have a period every 30 days.

# 28 day period cycle



Day 1-5, the lining of the uterus breaks down which causes the period



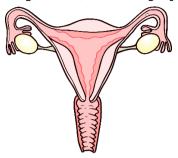
Day 6-10, the lining of the uterus begins to thicken again



Day 11-18, the egg is released from the ovary. This is called ovulation (usually on day 14)



Day 19-28, the lining of the uterus continues to thicken



Periods are a normal part of growing up and will continue for many years until the woman is around 50 years old. Girls can feel differently during their period, they can have 'mood swings' and some girls suffer from tummy pains. This is perfectly normal.

# Sanitary products

In order to keep clean and to absorb the period blood, girls wear sanitary pads in their knickers. Sanitary pads are strips of padding that have a sticky side you attach to the knickers to hold them in place. The other side of the pad is made of a special absorbent material that soaks up the blood.

Many girls use sanitary pads when they first start their period because they're easy to use. They come in many sizes, so you can change them depending on how heavy or light your period is.

Panty-liners are a smaller and thinner type of sanitary pad that can be used on days when your period is very light.

Tampons can also be during a period. Tampons are small tubes of cotton wool that you insert into your vagina to absorb the blood before it comes out of your body. There's a string at one end of the tampon, which you pull to remove it.

Tampons come with instructions that explain how to use them. If the tampon is inserted correctly into the vagina, they shouldn't be felt inside. However, if it uncomfortable or if it's painful, it might not be inserted properly.

Sanitary products should be changed every 3-4 hours but sooner if they become saturated with blood. Changing them regularly will prevent build-up of bacteria and avoid unpleasant odour.

### Disposing of sanitary products

Soiled pads and tampons should be wrapped in toilet paper and put in a bin. Special purpose sanitary bins are usually placed in female toilet cubicles.

Pads and tampons should not be flushed down the toilet as this will cause blockage.

Extended Activity — Circle Time - Puberty Changes and Personal Hygiene. A Circle Time lesson plan is available in a pdf document in Section 15, Number 11. Puberty cards Section 15, Number 12.

Equipment for Circle Time: floor mat, physical changes cards, wash bag with a variety of personal hygiene products, toiletries and or photos of toiletries, e.g. soap, shampoo, toothbrush, toothpaste, comb/hairbrush, hair gel, deodorant, shower gel, flannel, sanitary pads etc.

Show the hygiene section of the *Sense* CD 'Growing Up and Keeping Safe' — Unit 'Being Healthy'

# Extended Activity - Create an information booklet for a 10-year-old

Ask the pupils to create an information booklet (individually or in groups) or a Power Point presentation suitable for a girl or boy aged 10 years. The booklet should discuss the changes that will happen to them during adolescence, provide advice and it should include information on where they can go if they need help and support.

#### Extended Activity – Problem Page

Read an imaginary letter to 'Aunty B' discussing possible concerns which an adolescent person might have, you may use this as an example:

### Dear Aunty B

I'm worried because I haven't grown like my friends. My friends are taller than me and have started growing hair on their bodies, but this hasn't happened to me. Is there anything wrong? I am worried that my friends might notice that I am not the same as them and they might tease me. Please, please can you help me? A Liverpool football fan.

- 1. Pupils to write down some problems that a child might include in a letter to 'Aunty B'.
- 2. Individual pupils or in a group to write a letter to 'Aunty B' for the problem page or you may use the examples provided below.
- 3. Pupils to highlight the problems in the letter.
- 4. Individual pupils or group to write a replying to the person and their concerns, giving an explanation about their concerns and offering advice.

#### Problem examples:

#### Dear Aunty B

I am 10 years old and will soon be moving to secondary school. I'm worried about moving in case I'm not with my friends. I'm also worried that I might start my period at school and I won't know who to turn to. I wonder if you can help me? JLS' biggest fan.

#### Dear Aunty B

I started my period 6 months ago and every time I have my period I feel different. One minute I am happy the next minute I feel angry, sad and excitable. Is there something wrong with me? I don't want to lose my friends because I am moody with them sometimes. Can you help me please? A fan of chocolate.

# Dear Aunty B

I have noticed that I sweat a lot after games and sometimes there is a nasty sweaty smell on me. This makes me feel embarrassed and I am afraid that somebody else might notice and say things about me. I wash my face and clean my teeth every day. Is there anything wrong with me? Please, please can you help me? A rugby fan.

# Section 6 - A loving relationship

Success Criteria -

The pupils will understand the:

- qualities of being in a loving, stable personal relationship before a couple decide to have a baby.
- importance of a stable, secure and loving environment for family life.
- nature of marriage and its importance to family life and the bringing up of children.
- differences in family structures.

Different Families - see poster Different Families in Section 15, Number 14

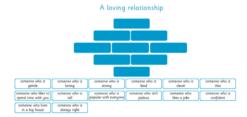
All families are different and children are brought up in different family structures. What's important is to have a family that loves and cares for its children. (Note: If you have children in your class with two dads, two mums or a transgender mum or dad it can be helpful to know how their parents talk about their family. This will help you respond to other pupils' questions.)

Some children may have a mum and dad, some a mum, some a dad, and some have two mums or two dads. When a man loves another man they are called gay. When a woman loves another woman they are called lesbians. Same sex couples love each other in the same way as men and women love each other. Children of same sex couples have two mums or dads and both parents take care of the children and love them.

Some parents are married and others are unmarried. Two women and two men or a woman and a man are able to marry in Britain. Some children have divorced parents and have two different sets of parents/stepparents.

Some children live with family members or family friends. Some children may be in foster care and some may have been adopted into another family.

Print the statement cards from Section 15, Number 15 - What makes someone special, and a good, loving friend?



Show the statements and the diamond 9 shape on the screen. Divide the class into groups of 3 or 4 and give each group a set of cards. Ask each group to discuss the cards and set them out a diamond shape in accordance with their importance. The most important at the top, the least important at the bottom and the ones which are not important at all, to one side.

Discuss where each group have placed their cards. Discuss with the whole class and try to come to a consensus about where to place the cards within the Diamond 9 by moving the statement cards during the discussion.

In order to contribute towards providing information and to aid discussion, it is suggested that you show an unit from the *Sense* CD "Growing up and Keeping Safe" — the pupils discussing "What does love mean?" Section - 'Being Healthy', Unit - 'Sex'.

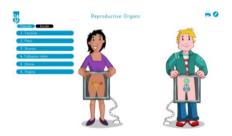
**Extended Activity** — Ask each pupil to create a mind map of words/terms/sentences explaining what they believe is important in being a good and loving parent.

# Section 7 - Reproductive Organs

Success Criteria –

The pupils will understand

• the functions of male and female sexual organs in relation to conception.



Move the cursor onto the labels on the left in order to show the organs and their function.

**Ovaries** — produce the female's hormones oestrogen and progesterone. They are the same size as small strawberries. Between 1-2 million tiny eggs are stored in the ovaries. One ovary releases an egg every 28 days.

**Fallopian Tube** — this is where the sperm meets the egg. The sperm fertilizes the egg and it is carried to the womb.

The uterus — the uterus lining becomes thick and spongy in preparation for the egg. If the egg is fertilized, the embryo embeds itself in the uterus lining and this is where the baby grows until it born.

**Penis** – sperm is released from the penis.

**Testicles** — two small soft balls within the scrotum. This is where sperm is produced.

**Vagina** — the inside part of the female body which links the womb with the external part. Babies are born through the vagina.

# Section 8 – Conception

Success Criteria -

The pupils will understand:

• what happens during conception.

In order to contribute towards the information and to aid discussion, it is suggested that sections from the *Sense* CD "Growing up and Keeping Safe" is shown. Section 'Being Healthy', Unit - 'Sex' the pupils discussing "What do we mean with the word sex?", "Where do babies come from?" as well as the video clip "Why do people have sex?".



Click on the red arrow to show the sperm swimming toward the egg. The egg is fertilized and the cells separate to create a baby as it travels through the Fallopian tube. The baby is called an embryo at this stage. Look at the embryo embed itself in the lining of the uterus.

# Conception

When two people love and care for each other very much they want to share their feelings in a loving way by making love/sex/sexual intercourse. This makes them feel special and loved and very close to each other.

Sex can also be about making a baby. When a couple decide to make a baby they have sex. Their bodies respond to the special loving feelings they have for each other. The man's penis becomes hard and during the closeness they have towards each other the man's penis enters the woman's vagina. In time, millions of tiny sperms are released from the man's penis into the woman's vagina and they swim up to the fallopian tubes to meet the woman's egg.

The sperm penetrates the outer layer of the egg and fertilizes the egg. When the egg is fertilized the baby cells will start to develop into an embryo as the egg travels from the fallopian tube to the uterus. Once in the uterus the embryo embeds itself in the thick spongy wall, this is called conception. The baby will grow and develop in the uterus for 40 weeks until the birth.

# Note if asked – How do you prevent pregnancy when you have sex?

There are lots of different methods that couples can use to stop them having babies. The doctor can provide a prescription for some things or it is possible to buy some things from a shop such as condoms.

A condom is a pouch made of very thin latex/rubber sheath. The man will roll it down his penis to cover the opening of the penis. During sex sperm is released from the man's penis and it will stay in the condom stopping the sperm from getting into the woman's vagina and making her pregnant.

# In Vitro Fertilisation (IVF) / Artificial Insemination

Babies can be made in different ways. For some couples as well as same sex couples the sperm and the egg are unable to meet inside the woman's body and fertilize to produce a baby.

A specialist doctors can help the egg and sperm come together outside of the body, in a specialist laboratory. The doctor will place the egg and sperm in a special glass dish in an environment that will allow them to fertilize and enable the baby cells to grow into an embryo. Around 6 days after fertilization, the very tiny embryo is then placed inside the mother's uterus by the doctor using specialist equipment. The baby will then grow like any other baby.

Some women are unable to carry a baby during pregnancy and they may choose to have a surrogate mother. This means that another woman becomes pregnant for someone else. A surrogate is a special woman who offers to help a family to have a baby.

For surrogate pregnancies, fertilization of the egg and sperm is usually done by artificial methods such as IVF. The surrogate mother's eggs or the woman's eggs may be used and fertilized by the male partners' sperm or a donor sperm (sperm from a man who has donated his sperm to a fertility clinic). If the IVF method has been used it is the same procedure as any IVF conception. The surrogate mother will carry and look after the baby during pregnancy until it is born.

### Note if asked – How do you prevent pregnancy when you have sex?

There are lots of different methods that couple **can** use to stop them having babies. A doctor can provide a prescription for medication or it is possible to buy condoms from a shop.

A condom is a very thin latex/rubber sheath. The man will roll it down his penis to cover the opening of the penis. During sex sperm is released from the man's penis and it will stay in the condom stopping the sperm from going into the woman's vagina and making her pregnant.

# Gender of Baby - Boy or Girl?

A man's sperm contains 23 chromosomes and the woman's egg contains 23 chromosomes. When the sperm fertilises the egg this make 46 chromosomes. Every normal human cell contains 46 chromosomes (23 pairs)

Chromosomes are tiny threadlike structures that each carry around 2,000 genes. Genes determine a baby's inherited characteristics, such as hair, eye colour, blood group, height and build.

#### X and Y chromosomes

Both the man's sperm and the woman's egg play a part in determining the sex of a baby.

A fertilised egg contains 1 sex chromosome from the woman and 1 sex chromosome from the man.

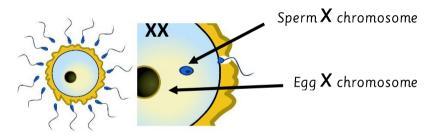
The woman's sex chromosome is known as chromosome  $\mathbf{X}$ . The egg only has the  $\mathbf{X}$  chromosome



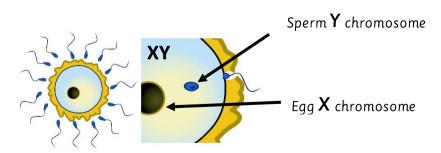
The sex chromosome in the man's sperm may be X or Y chromosome.



If a sperm with the X chromosome fertilises the egg this means that the baby will be a girl (XX).



If a sperm with the Y chromosome fertilises the egg it will be a boy (XY)



Extended Activity - Commentary (review how the egg is fertilized and assess pupils' understanding)

Ask the pupils to write a commentary (similar to TV commentary) about what they see on the screen. It is important that they use the correct terms during their commentary.

Ask them to read them out to the rest of the class — you can use role play, use a flip camera, microphone etc. in order to develop their linguistic skills.

**Section 9** —**Development of the baby** — Click to see the baby develop in mum's abdomen at the different stages of pregnancy.

Success Criteria –

The pupils will understand

• how the baby develops during pregnancy.



• The fertilized egg implants itself in the wall of the uterus so that it gets oxygen and nutrients from the mother which allows it to grow into a baby.

#### 1 month / 4 weeks



- All details about how the baby will look have been decided baby's sex, hair colour, eye colour, how tall it will grow and whom will it look like.
- By the time it reaches the uterus, it has become a mass of over 100 cells called an embryo.
- When the embryo is 1 month old the heart has started to form.
- The embryo is about the same size as a grain of rice.
- The mother may not know that she is pregnant by this time, as she has not yet missed a period.

# 2 months / 8 weeks

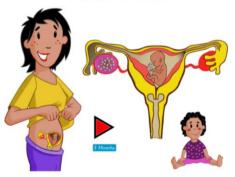




- The major internal organs are all developing the brain, lungs, heart, intestines, liver and kidneys.
- The face has started to form eyes, mouth and tongue. The head is growing at a much faster rate than the rest of the body.
- The legs, arms, hands, fingers, feet and toes are developing.
- The backbone starts to grow.
- The baby has grown to about 3cm in length and is about the same size as your big toe.

# 3 months / 12 weeks

Development of the baby



- The baby has fully formed.
- All the organs have developed as well as muscles, ears, lips, bones and the sex organs but there is still a lot of development left.
- The eyelashes have started to develop.
- The baby can now move its arms and legs.
- The heart beats strongly and quickly.
- The mother's abdomen has grown because the baby is growing bigger.
- The baby measures approximately 6cm in length, the same size as an adult's thumb.
- The mother goes to see the doctor or the midwife to make sure that the baby is growing properly and is healthy.

#### 6 months /24 weeks



- The hair starts growing.
- It looks more like a baby.
- The baby can hear voices and music and it can sense light and darkness.
- The mother often feels the baby moving and kicking.
- The mother's abdomen has grown bigger because the baby has grown.
- The baby's heartbeat can now be heard through a stethoscope.
- The baby has grown to approximately 15 20cm in length.

#### 9 months / 40 weeks



- The baby moves less now because there isn't a lot of room inside the mother's abdomen.
- The baby's head usually faces downwards in preparation for the birth.
- The baby starts to get hiccups as it prepares to start breathing.
- The baby's teeth start to grow underneath it's gums
- The baby has grown to about 50cm in length and is fully grown.

# **Extended Activity – Group Work** (sort cards development of baby)

- Cards Section 15 Number 16
- Create cards with lines equal to the baby's measurement 0.5cm, 3cm, 6cm, 30cm, and 50cm.

Ask the pupils in their groups to organise the cards in order of the baby's development.

#### Soliloguy

Introduction – from the unborn baby to its mother

- Baby inside mother's abdomen.....
- When does the brain develop .....
- What might the baby be thinking when mum take exercise/walk/sleeps/eats healthily/laughs/sings/listens to music/smokes/drinks alcohol/takes drugs that are not medicinal etc. ......
- Different stages of development .....
- Plenty of room to move around .....
- Less room to move around .....
- Hiccups ......
- Before the birth to what is the baby looking forward?

# Section 9 – Mum keeping the baby healthy.

Success Criteria –

The pupils will understand

• the importance of keeping healthy during pregnancy in order to have a healthy baby.

# Extended Activity - Balanced Diet

Discuss a balanced diet by using the Eat Well Plate.

#### The Eat Well Guide

- plenty of fruits and vegetables at least 5 portions of a variety of fruit and vegetables
- plenty of bread, potatoes and other food that contain starchy carbohydrates choose whole grain varieties when possible.
- smaller amounts of milk and dairy products.
- some meat, fish, (including oily fish at least once a week), eggs, beans and other sources of protein that are not dairy products
- very small amounts of foods and drinks that contain a lot of fat and / or sugar
- choose unsaturated oils and use in small amounts
- drink 6-8 glasses of water, lower fat milk, sugar -free drinks including tea and coffee



**Science** - How do we live healthily?

i. Ask the pupils to list the things we do to live healthily. Sort the list out by using the Diamond 9 Ranking (or other appropriate strategy)

Or

ii. Give them a list to sort out by Diamond 9 Ranking e.g. eat healthily/weight lifting/jogging/exercise/don't smoke/don't take illegal drugs/drink plenty of water/has plenty of sleep/don't drink alcohol/washing etc.

**Group Activity** — **Mind Map**, ask the pupils to write on paper <u>What's good for the baby?</u> and <u>What's bad for the baby?</u> Exchange papers with among the groups and add their suggestions in a different colour. Discuss all suggestions with the class so that they can learn from each other.

Show section 9 and discuss where to place their ideas (will they put them under "Healthy" or "Not Healthy"?).



Click on the apple to show the baby having the nutrients as the mother eats the apple — the baby looks happy.

Click on the cigarette to show how the baby receives the chemicals from the cigarette as the mother smokes, watch the baby's head showing that it doesn't like it.

You could discuss the importance of Mum keeping healthy during her pregnancy so that she has a healthy baby.

# Section 10 - The Birth

Success Criteria –

The pupils will

• understand how babies are born.

Reading — A list of books discussing birth is provided at the end of the booklet.



The information gathered in activity 2, 'Myself as a baby' will help you to know where the pupils were born i.e. in hospital, at home, in an ambulance etc.

When the baby is 40 weeks old it is ready to be born. Most babies are born in hospital but some are born in other places. Doctors and midwives are usually available to help the mother during the birth.

The mother's abdomen becomes very tight in order to help the baby come out. This is called labour. The muscles of the uterus become tight in order to squeeze the baby out from the uterus, into the vagina and to the outside. The doctor or midwife holds the baby as it comes out. The baby takes its first breath and usually starts to cry. The doctor or midwife then cut the umbilical cord and the baby is free. The baby is then given to its mother so that she can cuddle him/her.

Some babies are born by Caesarean. This means that the mother will need to have an operation. A specialist doctor will open the mother's abdomen so that the baby comes out safely. She will be given special drugs by the doctor so that she doesn't feel any pain or she will be put to sleep during the birth. After a Caesarean the mother will feel a bit sore where they operated on her abdomen but she will soon get better.

# Section 11- Feeding the baby

Success Criteria –

• Pupils will understand that parents make choices on how babies are fed.

Use the information gathered in Section 2 to aid discussion relating to feeding.

Reading/story books — A list of children's books that discuss positive images of breastfeeding is available at the end of this booklet.



The mother has a choice about how she wants to feed the baby. Some mothers decide to breastfeed and others will choose to feed with a bottle. A baby that is fed its mother's milk receives antibodies that can safeguard the baby against illnesses and will give the baby a better chance of growing up healthily.

If a baby is bottle fed, the baby's feed is made up of dried milk powder which is mixed with water in the bottle. Dad can also help by giving the baby a bottle feed, water or the mother's milk which has been expressed.

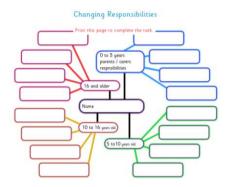
**Extended Activity** — Research into the advantages and disadvantages of breastfeeding and bottle feeding. Worksheet Feeding the Baby Section, 15 Number 17

# Section 12 – Changing responsibilities

Success Criteria –

The pupils will understand:

• the need to take increasing responsibility and the importance of making good choices as they grow older.



Give each pupil a worksheet changing responsibilities Section 15, Number 18 so that they can think about their changing responsibilities. The aim of this task is to give the pupils an opportunity to consider their increasing responsibilities and to look ahead to when they are older. 0-5 years old, 5-10 years old, 10-16 years old and 16 years old and older.

Section 13 — Part 2 Grid KWL - What have they learnt? How did they learn? and from where would they get more information if they wanted to?

Success Criteria —

Pupils will assess their own success on the tasks.

Grid Learn, How, Where - Section 15, Number 11. Ask the pupils to fill in the columns with the appropriate information. Use the writing pen symbol to provide suggestions on the screen.



Section 15 — Various additional documents for use with the electronic resource. Additional documents available to use with floor mat (if purchased).

| 1  | Background information for primary teachers                         |
|----|---|
| 2  | Class Agreement   |
| 3  | KWL Grid Part 1   |
| 4  | Worksheet — Myself as a Baby  |
| 5  | Additional Artwork  |
| 6  | A4 Mat image  |
| 7  | Traffic lights  |
| 8  | Traffic light labels  |
| 9  | Body parts labels — floor mat Circle Time                           |
| 10 | Circle Time – Differentiate between male/female and appropriate and |
|    | inappropriate touching  |
| 11 | Circle Time - Puberty Changes and Personal Hygiene                  |
| 12 | Puberty cards   |
| 13 | Instructions  |
| 14 | Poster Different Families   |
| 15 | Card sort - What makes someone special, and a good, loving friend?  |
| 16 | Card sort — development of baby                                     |
| 17 | Feeding the Baby  |
| 18 | Worksheet Changing Responsibilities                                 |
| 19 | Grid (part 2) Learn, How, Where                                     |
| 20 | Parent Information Booklet  |

# Glossary of Sex Terms

**Bisexual** - refers to a person who has an emotional and/or sexual orientation towards people of more than one gender.

**Coming out** - when a person first tells someone/others about their identity as lesbian, gay, bisexual trans or questioning.

Gay/Homosexual - refers to a man who has an emotional, romantic and/or sexual orientation towards men. Also a generic term for lesbian and gay sexuality - some women define themselves as gay rather than lesbian.

Gender - often expressed in terms of masculinity and femininity, gender is largely culturally determined and is assumed from the sex assigned at birth.

Gender identity - a person's internal sense of their own gender, whether male, female or something else, which may or may not correspond to the sex assigned at birth.

**Heterosexual / Straight** - refers to a person who has an emotional, romantic and/or sexual orientation towards people of the opposite gender.

**Homophobia** - the fear or dislike of someone who identifies as lesbian or gay.

**Lesbian** - refers to a woman who has an emotional, romantic and/or sexual orientation towards women.

LGBT - the acronym for lesbian, gay, bi and trans. More recent, 'Q' has been added - LGBTQ for Queer or Questioning.

**Sex** - assigned to a person on the basis of primary sex characteristics (genitalia) and reproductive functions.

**Sexual orientation** - a person's emotional, romantic and or sexual attraction to another person.

Trans - an umbrella term to describe people whose gender is not the same as, or does not sit comfortably with, the sex they were assigned at birth. Trans people may describe themselves using one or more of a wide variety of terms, including Transgender, Transsexual, Gender-queer (GQ), Non-binary, Cross-dresser, Genderless, Non-gender, Trans man, Trans woman, Trans masculine and Trans feminine.

**Transphobia** - the fear or dislike of someone who identifies as trans, including the denial/refusal to accept their gender identity

**Transsexual** - A transsexual person - Someone who transitioned to live in the 'opposite' gender to the one assigned at birth.

**Queer** - in the past a derogatory term for LGBT individuals. The term has now been reclaimed by LGBT young people in particular who don't identify with traditional categories around gender identity and sexual orientation but is still viewed to be derogatory by some.

Questioning - the process of exploring your own sexual orientation and/or gender identity.

Stonewall Cymru

https://www.stonewallcymru.org.uk/help-advice/glossary-terms-0

# List of Books and Additional Resources

English explanation for English books, Welsh Explanation for Welsh books

Suitable for the Foundation Phase

Mummy Laid an Egg – Babette Cole ISBN 0-948930-071

Sut wyt ti'n teimlo? – Gillian Liu & Jane Green

ISBN 0-237-51916-x

Mae gen i gyfrinach – Child's Play

ISBN 0-85953-491-x

Tell Me Again About the Night I was Born (Trafod Mabwysiadu)

Willy and Hugh — Anthony Browne 997780-x

ISBN 0-09-

Willy the Wimp – Anthony Browne

ISBN 0-7445-4363-0

Suitable for Years 3 and 4 (life cycle, feelings, relationships and respect)

Teimlo'n Bryderus — Sally Hewitt ISBN 0-86174-099-8
Teimlo'n Ddig— Sally Hewitt ISBN 0-

86174=096-3

Teimlo'n Genfigennus — Sally Hewitt ISBN 0-86174-097-1 Teimlo'n Swil — Sally Hewitt ISBN 0-86174-098-x

Elfed – David McKee ISBN 1-85596-164-4

Cyfres All about you - Jillian Powell Who are your friends? ISBN 0-7502-0789-2

Who are your family ISBN 0-7502-0790-6

Cufres Life Education— Franklin Watts

Your Special Too ISBN - 07496-23675, My Wonderful Body ISBN 0-7496-2364-0 I'm Happy I'm Healthy ISBN 0-7496-2365-9, I am Special ISBN 0-7496-2366-7

Cyfres Meet the Family - Franklin Watts

My Brother ISBN 0-7496-4886-4, My Sister ISBN 0-7496-5115-6

My Dad ISBN 0-7496-4884-8, My Mum ISBM 0-7496-4883-x

My Aunt and Uncle ISBN 0-7496-5116-4, My Grandparents ISBN 0-7496-4885-6

Cyfres Choices Althea, A&C Black, London - Being Friends - ISBN 07136-4500-8

Something Elses – Kathryn Cave & Chris Riddell ISBN 0-14-054907-2

How my body Works Growing – Barrie Knowles ISBN 0-7502-0433-8

The Human Cycle – Nina Morgan ISBN 0-7502-2126-7

Looking After Myself – Sarah Levete ISBN 0-7496-3626-2

# Suitable for Years 5 and 6

CD Sense 'Tyfu i Fyny a Chadw'n Ddiogel'

English Version ISBN-10: 0862439930

Where Willy Went - Nicholas Allan

Fel hyn rydych chi'n tyfu – Dr Patricia Pearse ISBN 1-85596-006-0

How did I begin – Mick Manning ISBN 0-7496-56611

Lets talk About Where Babies Come From – Robie Harris ISBN 978-1-84428-173-2

What's happening to me? Boys – Alex Frith ISBN 978074607663-7

What's happening to me? Girls – Alex Frith ISBN 978074606995

The Human Cycle – Nina Morgan ISBN 0-7502-2126-7

Your Body Babies – Anna Sandeman ISBN 07496-3895-8

Where do babies come from – Susan Meredith ISBN 0-7460-0690-x

My New Dad - Rebecca Hunter (perthynas-ymateb) ISBN 0-237-52018-4

How are babies made – Alistair Smith ISBN 07460-2503-3

Young Citizen .. Growing Up – Kate Brookes ISBN 0-7502-2346-4

Hair in Funny Places – Babette Cole ISBN 0-09-

926626-1

The Body Book – Claire Rayner ISBN 0-590-55608-8

The World is Full of Babies! – Mick Manning and Brita Granstrom

ISBN 0-7496-2752-2

Were Going to Have a Baby — Dominique De Saint Mars & Serge Bloch

ISBN 0-670-83848-9

Birth and Growth – Anita Ganeri ISBN 0-7496-1490-0

What happens when you GROW? – Joy Richardson ISBN 0-237-60197-4

The Human Cycle – Nina Morgan ISBN 0-7502-2126-7

**The Baby's Catalogue** - Janet and Allan Ahlberg ISBN78-0141380773 No written story to it, but a catalogue of objects related to a baby's everyday life.

# **Aren't You Lucky!** - Catherine Anholt

ISBN978-0099921608

A picture book which tells of an only child's reaction to the arrival of a baby brother. The story has jealousy, moodiness, tiredness - and a happy ending.

# When I Was a Baby – Catherine Anholt

ISBN978-0749703165

A 3 year old, watching her mother prepare for a new baby, wants to know about the time when she was a baby.

# Sophie and the New Baby - Laurence Anholt

ISBN978-1408302132

A story which acknowledges the emotional ups and downs experienced by a small girl whose existence is about to be turned upside down by the arrival of a new baby.

#### The Biggest Bed in the World - Lindsey Camp

ISBN978-0006646815

Ben's dad wasn't getting much sleep. There were too many children in his bed. Not just Ben, but also his baby brother Billy. And then the twins, Beth and Bart, arrived. There was only one thing for it! Ben's dad fetched his tools, and set to work building the biggest bed in the world. Then the triplets, Briony, Bella and Boris were born.

# Babi Newydd - Anne Civardi

ISBN978-1855967977

Part of the First Experiences series.

The New Baby - Anne Civardi

ISBN978-0746066652

Rhan o'r gyfres Profiadau Cyntaf.

Will There Be a Lap for Me? - Dorothy Corey

ISBN978-0807591109

Kyle's special place is on Mother's lap, but Mother's lap is getting smaller.

**We Have a Baby** – Cathryn Falwell

ISBN9780395739709

Simple text of few words and cut-paper artwork. American publication.

#### Brand New Baby - Bob Graham

ISBN978-1406316407

The story chronicles the arrival of baby Walter — as seen through the eyes of his older brother and sister.

#### Hi New Baby! - Robie H. Harris

ISBN978-0744582260

Talks to children about what happens when a new sibling arrives on the scene and explores the thoughts and feelings of an older child as she gets to grips with this latest intrusion on her life.

Mama's Milk — Mamá me Alimenta — Michael Elsohn Ross ISBN 978-1582462455 A simple introduction to nursing, showing babies and baby animals being fed. This edition is English/Spanish.

#### Rosie's Babies - Martin Waddell

ISBN978-0744523355

While mum is putting the baby to bed, 4 year old Rosie never stops talking. She wants Mum to know all about *her* babies, and she wants Mum's attention..

Llyfrau Ffeithiol

Baby's First Year - Debbie MacKinnon ISBN 978-0711221284

A photographic accout of Jack's first year.

Love That Baby! – Kathryn Lasky ISBN 978-1844287581

An informative introduction to babies and baby ways.

**Supermom** — Mick Manning and Brita Granström ISBN 978-0807576663 A book about mothers — human and animal — and the ways they look after their young.

American publication.

The World is Full of Babies! – Mick Manning ISBN 978-0749627522

A look at babies everywhere – human and animal.

Bwyd Babanod – Bobbie Neate ISBN 9781856445870

Sut mae Babanod yn Tyfu – Bobbie Neate ISBN 9781856445900