

# SCIENCE

## Human Reproduction

It is not necessary to carry out all the activities contained in this unit. Please see *Teachers' Notes* for explanations, additional activities, and tips and suggestions.

Theme	Human Reproduction	
<b>All students:</b>  Activities that are suitable for <b>Learning Support, Language Support</b> and the <b>Mainstream Subject Class</b> include:	Keywords	3
	Vocabulary File	4-6
	Activating Students' Existing Knowledge	7
	Completing Sentences	13
	Multiple Choice	14
	Wordsearch	19
<b>Learning support and Language support:</b>  Activities suitable for students receiving Learning or Language Support include:	Working with words	8
	Picture Sentences	9
	Odd One Out	10
	Science Keywords	11
	Unscramble the letters	12
	Alphaboxes	18
	Play Snap	20-22
<b>Language support:</b>  Additional activities for Language Support:	Vocabulary	15-16
	Grammar	17
<b>Levels for Language Support</b>	<b>A1 – B1</b> The language level of each activity is indicated in an information box.	
<b>Learning focus</b>	Using Science textbooks and accessing curriculum content and learning activities.	
<b>Acknowledgement</b>	The <i>English Language Support Programme</i> acknowledges the permission of Gill and Macmillan to reproduce excerpts from <i>Science Revision for Junior Cert.</i> by Shea Mullally	

**Note:** The categorisation of activities is indicative only and should not prevent teachers from using any activities that are considered suitable for a particular group of students.

## Making the best use of these units

### Learning Record

A copy of the Learning Record should be distributed to each learning support and language support student.

Students should:

1. Write the subject and topic on the record.
2. Tick off/date the different statements as they complete activities.
3. Keep the record in their files along with the work produced for this unit.
4. Use this material to support mainstream subject learning.

**Introduction** of a topic or activity should ensure that students understand **what** they are doing and **why**. Many students will have some difficulty in understanding both the language in the activity and the instructions/purpose for carrying out the activity.

You can create your **personal teaching resource** by printing these units in full and filing them by subject in a large ring binder.

### Encourage students to:

- Bring the relevant **subject textbooks** to learning/language support class. It does not matter if they have different textbooks as the activities in these units refer to vocabulary and other items that will be found in all subject textbooks. These units are based on curriculum materials.
- Take some **responsibility for their own learning** programmes by:



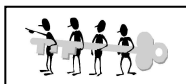
Developing a **personal dictionary** for different subjects, topics, and other categories of language, on an on-going basis. This prompt is a reminder.



Recording what they have learnt on the **Learning Record**, which should be distributed at the start of each unit.



Keeping their own **files** with good examples of the work produced for different subjects and topics. This file will be an invaluable **learning resource** in supporting mainstream learning.



Indicates that answers may be found at the end of the unit.

Don't forget that many of the activities in these units are also suitable as **homework** tasks or for **self-study**.

## Keywords

The list of keywords for this unit is as follows:

### Nouns

baby  
birth  
blood  
bloodstream  
body  
cervix  
contraception  
cord  
cycle  
egg cells  
eggs  
embryo  
fallopian tubes  
female  
fertilisation  
fluid  
fusion  
gamete  
hormones  
insemination  
intercourse  
labour  
lining  
link  
male  
man  
menstrual cycle  
menstruation  
method  
mixture  
mother  
nucleus/nuclei

offspring  
ovary/ovaries  
ovulation  
ovum  
penis  
period  
placenta  
pregnancy  
production  
puberty  
reproduction  
seminal fluid  
sex  
sexual intercourse  
sexual reproduction  
sperm  
sperm cell  
system  
testes  
tube  
umbilical cord  
uterus  
vagina  
weeks  
woman  
womb

### Verbs

to cushion  
to develop  
to divide  
to fill

to fuse  
to insert  
to involve  
to lodge  
to prevent  
to produce  
to release  
to shed

### Adjectives

amniotic  
average  
fallopian  
female  
fertile  
fertilised  
identical  
male  
menstrual  
new  
pregnant  
present  
reproductive  
sexual  
similar  
thickened  
umbilical

### Adverbs

sexually

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCIENCE: Human Reproduction

### Vocabulary file 1

Word	Meaning	Note or example*
birth		
cervix		
contraception		
cycle		
egg cells		
fallopian tubes		
fertilisation		

\*You may wish to write a sentence or phrase, make a note of the page in your textbook where this word appears or, if English is not your first language, provide a translation into your language.



Get your teacher to check this, then file it in your folder so you can use it in the future.

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCIENCE: Human Reproduction

### Vocabulary file 2

Word	Meaning	Note or example
gamete		
insemination		
intercourse		
menstrual cycle		
nucleus		
ovulation		
placenta		



Get your teacher to check this, then file it in your folder so you can use it in the future.

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCIENCE: Human Reproduction

### Vocabulary file 3

Word	Meaning	Note or example
to develop		
to divide		
puberty		
sexual intercourse		
to fuse		
to insert		
to produce		



Get your teacher to check this, then file it in your folder so you can use it in the future.

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCIENCE: Human Reproduction

**Language Level:** all  
**Type of activity:** whole class  
**Suggested time:** 10 minutes

## Activating students' existing knowledge

Use a spidergram to activate students' ideas and knowledge on the key points in this chapter. See **Teachers' Notes** for suggestions.

Possible key term for the spidergram:

### **human reproduction**

- Invite newcomer students to provide key words in their own languages.
- Encourage dictionary use.
- Encourage all students to organise their vocabulary into relevant categories (e.g. meaning, nouns, keywords, verbs etc.).



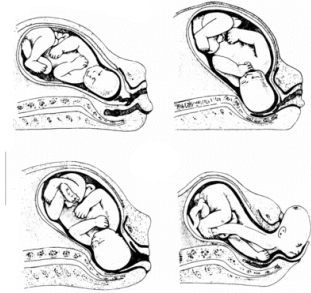
All students should record vocabulary and terms from the spidergram in their personal dictionaries.

Language Level: A1  
 Type of activity: pairs or individual  
 Suggested time: 30 minutes

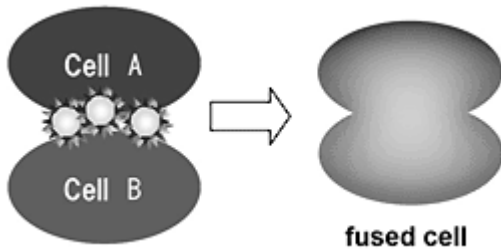


### Working with words

#### 1. Tick the correct answer



- a) rabbit
- b) birth
- c) bin
- d) apple



- a) cell fusion
- b) food
- c) notice board
- d) chalk

#### 2. Find these words in your textbook.

Write your own explanation for these words. Then write a note or example to help you remember the word. Use your dictionary if necessary.

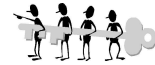
Word	Page in textbook	Explanation	Note or example
embryo			
fertilisation			
pregnancy			
puberty			



Check that these key words are in your personal dictionary.



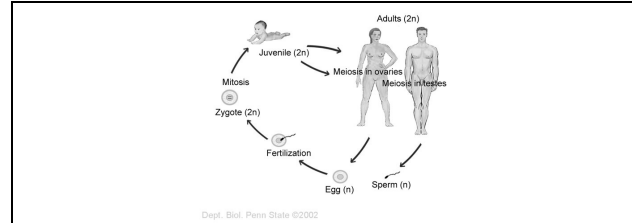
Language Level: A1  
 Type of activity: pairs or individual  
 Suggested time: 30 minutes



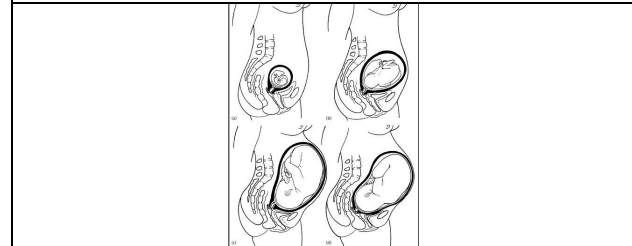
## Picture Sentences

### 1. Tick the correct answer

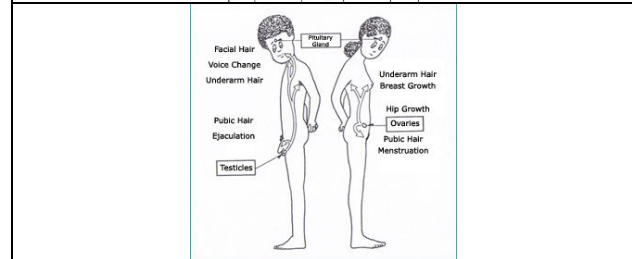
- a) This is a tree.
- b) This is a food web.
- c) This is the human life cycle.



- a) This is pregnancy.
- b) These are posters.
- c) This is a blackboard.



- a) This is a painting brush.
- b) This is rain.
- c) This is puberty.



### 2. Put these words in the correct order to form sentences.

fertilised the divides egg

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pregnancy human 40 is weeks the average

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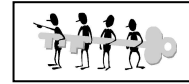
between 15 ages of 10 puberty is the and

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NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**SCIENCE: Human Reproduction**

Language Level: A1 / A2  
Type of activity: pairs or individual  
Suggested time: 20 minutes



**Odd One Out**

1. Circle the word which does not fit with the other words in each line.

Example: chair desk book **train**

egg sperm uterus photo

womb placenta face lining

house birth pregnant gamete

puberty boy girl wood

2. Find these words in your textbook. Then put them in short sentences in your own words. Use a dictionary if necessary.

to develop \_\_\_\_\_

to divide \_\_\_\_\_

to fuse \_\_\_\_\_

to produce \_\_\_\_\_

to release \_\_\_\_\_

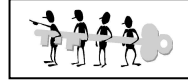


Check that these key words are in your personal dictionary.

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**SCIENCE: Human Reproduction**

**Language Level:** A2 / B1  
**Type of activity:** individual  
**Suggested time:** 20 minutes



### Hidden Keywords

1. Fill in the missing letters of the keywords listed below.

On the line beside each word, write whether the word is a noun, an adjective or a verb.

o\_ar\_ \_\_\_\_\_

pe\_i\_d \_\_\_\_\_

p\_ber\_y \_\_\_\_\_

w\_m\_ \_\_\_\_\_

2. Write as many words as possible related to **human reproduction**. You have 3 minutes!

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Check that these keywords are in your personal dictionary.



Language Level: A1 / A2  
 Type of activity: pairs or individual  
 Suggested time: 20 minutes



### Unscramble the letters

1. This happens to women every 28 days MNESTRAUIONT

**Answer** \_\_\_\_\_

2. This happens to boys and girls around 10-15 years  
 PBUERYT

**Answer** \_\_\_\_\_

3. The sperm cell is made in the... TETSES

**Answer** \_\_\_\_\_

4. The egg is made in the... ROAVY

**Answer** \_\_\_\_\_

Look at each word as you write the answer.

Is your spelling correct?

Can you pronounce the word?

Do you know what the word means?

Have you got this word in your personal dictionary?



### Solve the secret code

English=	A	C	D	E	F	I	N	M	O	S	T	U
Code=	B	X	Y	F	G	Q	R	O	L	E	A	W

example: (code) EAWYFRA = STUDENT (English)

GWEQLR =

---

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

SCIENCE: Human Reproduction

Language Level: A2 / B1  
Type of activity: pairs or individual  
Suggested time: 40 minutes



### Completing text

1. Fill in the blanks in these sentences. Use words from the Word Box below.

Sexual reproduction is the production of \_\_\_\_\_ by a male and female.

The male produces a male sex cell (gamete) called sperm. \_\_\_\_\_ is produced in the testes.

The \_\_\_\_\_ produces a female sex cell (\_\_\_\_\_) called an egg (ovum).

Eggs are produced in the ovaries. The production of eggs is called \_\_\_\_\_.

#### Word Box

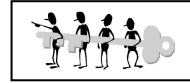
offspring	gamete	female
sperm	ovulation	

2. Read the text and select the word which you think belongs in the text. Discuss your answers with a partner, before checking with your teacher.

Pregnancy. The average length of human pregnancy is **40/14** weeks. During this time, the embryo develops in the uterus **promoted/protected** inside a bag of fluid called amniotic fluid. The amniotic fluid **cushions/cuddles** the developing embryo.

A tube called the umbilical cord **contacts/connects** the embryo to the placenta. The placenta is rich in blood vessels. In the placenta food and oxygen from the mother's blood **pass/past** into the baby's blood. Also, wastes, such as carbon dioxide, pass from the baby's blood **into/in** the mother's blood.

Language Level: A2 / B1  
Type of activity: individual  
Suggested time: 30 minutes



### Multiple choice

Read the text below and choose the best answers.

#### Development of the Embryo

At first, the embryo is a tiny ball of cells, about the size of a full stop. After three months of growth it will be about 10cm long and look like a tiny human being. It will have tiny arms and legs, with fingers and toes and very small, soft bones forming inside. It will appear to have a large head. As the foetus grows, the uterus expands to make room for it, and the mother's abdomen starts to swell.

Birth. The birth of a baby begins when the uterus (womb) muscles start to contract. This is called labour. The bag of amniotic fluid bursts, and further contractions push the baby out, usually head first. The umbilical cord is clamped and then cut. Shortly afterwards, the placenta (afterbirth) is also pushed out.

1. What size is the embryo at first?  
a) a football  
b) a full stop  
c) an egg  
d) a sack
2. After three months, what does it look like?  
a) a full stop  
b) an egg  
c) a ball of cells  
d) a tiny human being
3. What happens to the uterus during pregnancy?  
a) it expands  
b) it contracts  
c) it breaks  
d) it disappears
4. Is the baby usually born feet first?  
a) Yes  
b) No
5. Is the placenta also pushed out?  
a) Yes  
b) No

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCIENCE: Human Reproduction

Language Level: B1  
Type of activity: individuals/ pairs / small groups  
Suggested time: 40 minutes

## Vocabulary

### Cause and effect

1. Notice some of the phrases we use in English, to join two ideas together.

### I am going to continue studying science

<b>because</b>	it is interesting.
<b>because of</b>	my good teacher.
<b>in case</b>	I decide to study medicine.
<b>in order to</b>	learn more about the physical world.
<b>so that</b>	I can become a scientist.
<b>if</b>	it's possible.
<b>unless</b>	there's a clash in my timetable.
<b>although</b>	I know I am not very good at it.
<b>even if</b>	I have to give up another subject.
<b>unlike</b>	my brother, who hates science.

## Vocabulary

### Cause and effect (continued)

2. Use the ten sentences in exercise 1 as a model to continue the next sentence in ten different ways.

I am going to continue living in (Dublin, Waterford \_\_\_\_\_)

because \_\_\_\_\_

because of \_\_\_\_\_

in case \_\_\_\_\_

in order to \_\_\_\_\_

so that \_\_\_\_\_

if \_\_\_\_\_

unless \_\_\_\_\_

although \_\_\_\_\_

even if \_\_\_\_\_

unlike \_\_\_\_\_

3. Write down the first half a sentence (with one idea) similar to the sentence halves in exercise 1 and 2. Swap your sentence halves with another student. You must each continue the sentence in ten ways. Swap the finished sentences and check one another's work.



When your teacher has checked this, file it in your folder so you can use it in the future.



NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**SCIENCE: Human Reproduction**

**Language Level:** all  
**Type of activity:** individual  
**Suggested time:** 40 minutes



## Grammar Points

### Prepositions

1. The following sentences are taken from units on human reproduction in your science textbooks. Can you add the missing prepositions?

- The fusion \_\_\_\_ the male and female gamete is called fertilisation.
- Puberty in boys is the time \_\_\_\_\_ ten and fifteen.
- The egg is released \_\_\_\_ average every 28 days.
- The egg passes \_\_\_\_ the fallopian tube.
- Egg cells are produced \_\_\_\_ the ovaries.
- The fertile period extends \_\_\_\_ day 11 \_\_\_\_ day 18.

along of from in between on to

2. Some verbs and prepositions go together. Below are some verbs from your keywords list. Decide which prepositions should go with them.

to divide \_\_\_\_\_ (parts or groups)

to fill \_\_\_\_\_ (with water)

to insert \_\_\_\_\_

involve \_\_\_\_\_

to prevent \_\_\_\_\_

to release \_\_\_\_\_

3. Now it's your turn! Go to your textbook and write out six sentences, leaving a blank where the prepositions should be. Pass these sentences to another student for him/her to complete.

### Alphaboxes

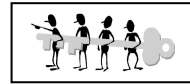
Using your textbook, find **one** word beginning with each of the letters of the alphabet. Write the word in the relevant box. You could also write the word in your own language.

a	b	c
d	e	f
g	h	i
j	k	l
m	n	o
p	q	r
s	t	u
v	w	xyz

Do you understand all these words?



Get your teacher to check this, then file it in your folder so you can use it in the future.



### Word search

Find the words from the list.

```

                N J
            J O D D
        S P E R M K
    X W E M B R Y O
        S A L I N I N G D H
            V V I A J C E L L S X D
                K F U F A L L O P I A N G X
                    F E R T I L I S A T I O N G P Z
                        S D X Q S F E R T I L I S E D Y A R
                            D A W V I N T E R C O U R S E T I E G G
                                E V P L A C E N T A M E N S T R U A L E
                                    I K X J S M O V U L A T I O N R E K
                                        Y V M R E P R O D U C T I V E B
                                            J B A U T E R U S W N Y R D
                                                F E M A L E O S Y V R N
                                                    F L U I D M A L E F
                                                        J E Z X D G F X
                                                            C Y C L E R
                                                                H F S Z
                                                                    T F
    
```

CELLS  
 CYCLE  
 EGG  
 EMBRYO  
 FALLOPIAN  
 FEMALE  
 FERTILISATION  
 FERTILISED  
 FLUID

REPRODUCTIVE  
 SPERM  
 UTERUS  
 INTERCOURSE  
 LINING  
 MALE  
 MENSTRUAL  
 OVULATION  
 PLACENTA

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
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sperm	sperm
reproduction	reproduction
menstruation	menstruation

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCIENCE: Human Reproduction

eggs	eggs
male	male
female	female

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

SCIENCE: Human Reproduction

<b>sex</b>	<b>sex</b>
<b>ovulation</b>	<b>ovulation</b>
<b>fallopian tubes</b>	<b>fallopian tubes</b>

## Answer key

### Working with words, page 8

1. b,a

### Picture Sentences, page 9

c, a, c

The fertilised egg divides.

The average human pregnancy is 40 weeks.

Puberty is between the ages of 10 and 15.

### Odd one out, page 10

Photo, face, house, wood

### Key words, page 11

Ovary (noun), period (noun), puberty (noun), womb (noun)

### Unscramble the letters, page 12

Menstruation, puberty, testes, ovary

Secret code: fusion

### Completing text, page 13

1. Sexual reproduction is the production of **offspring** by a male and female. The male produces a male sex cell (gamete) called sperm. **sperm** is produced in the testes. The **female** produces a female sex cell (**gamete**) called an egg (ovum). Eggs are produced in the ovaries. The production of eggs is called **ovulation**.
2. 40, protected, cushions, connects, pass, into

### Multiple Choice, page 14

1b, 2d, 3a, 4b, 5a

### Grammar points, page 17

1. the fusion **of**, **between** ten and fifteen, **on** average, **along** the fallopian tubes, produced **in** the ovaries, extends **from** day 11 **to** day 18.
2. Note: these are the common verb + prepositions combinations, other s are possible, check with your dictionary or with your teacher if you are not sure.  
to divide **into** parts, to fill **up** with water, to insert **into**, to involve **in**, to prevent **from**, to release **from/into**

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

SCIENCE: Human Reproduction

Word Search, page 19

N J  
 J O D D  
 S P E R M K  
 X W E M B R Y O  
 S A L I N I N G D H  
 V V I A J C E L L S X D  
 K F U F A L L O P I A N G X  
 F E R T I L I S A T I O N G P Z  
 S D X Q S F E R T I L I S E D Y A R  
 D A W V I N T E R C O U R S E T I E G G  
 E V P L A C E N T A M E N S T R U A L E  
 I K X J S M O V U L A T I O N R E K  
 Y V M R E P R O D U C T I V E B  
 J B A U T E R U S W N Y R D  
 F E M A L E O S Y V R N  
 F L U I D M A L E F  
 J E Z X D G F X  
 C Y C L E R  
 H F S Z  
 T F