# Checkpoint Task

# Organism Level Systems

## Instructions and answers for teachers

These instructions cover the learner activity section which can be found on [page 8](#_Checkpoint_Task). This Checkpoint Task should be used in conjunction with the KS3–4 Biology Transition Guide: Organism level systems, which supports OCR GCSE (9‒1) Gateway Science Biology A.

**When distributing the activity section to the learners either as a printed copy or as a Word file you will need to remove the teacher instructions section.**

### Introduction

This checkpoint task is designed to consolidate Key Stage 3 learning. It consists of four sections, the first three can be printed and given to learners to work through individually. The final section is a card sort.

Section one asks learners to label diagrams of the male and female reproductive systems and match the parts to their role. For lower ability learners you may want to hand out a separate sheet with the keywords written on, or put the keywords on the classroom whiteboard.

Section two requires learners to colour code a 28 day cycle to show what processes occur during the menstrual cycle.

Section three gives learners the answers to some questions and learners have to write the question. There is no one correct question for each answer, expect to receive a variety of questions from the class for each answer. To check learners’ understanding of the processes and key terminology, teachers should encourage learners to use key words learnt throughout the topic when writing the questions.

Section four is a card sort grouping the changes that occur during puberty. Learners group each change under the headings 'girls', 'boys' or 'both'. This could also be done as a whole class mini whiteboard activity.

### Teacher Preparation

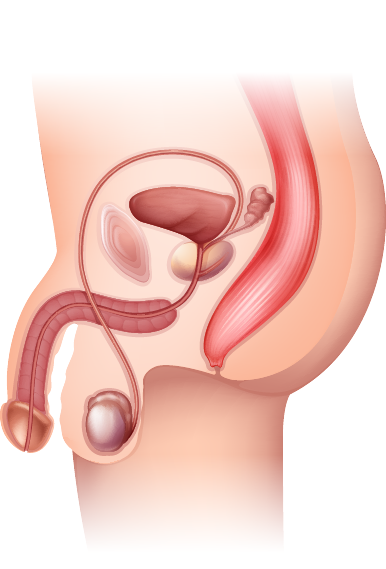
For lower ability learners, the sheet with the key words for labelling the reproductive system diagrams in section one will need to be printed out. This can be done for the whole class, or for individuals within a class.

Before the task, teachers will need to photocopy and cut out the cards for the card sort activity. It can be done individually or in pairs. Alternatively, the teacher can read out the statements individually and learners can write 'B', 'G' or 'Both' on a mini whiteboard and hold it up after a count of three.

Learners should be issued with the worksheet 'Adolescence and reproduction - Checkpoint task - Learner'. Learners should be able to work through the tasks on the worksheet individually. The last task is a card sort or if the teacher prefers, a whole class mini whiteboard question and answer task using the statements from the card sort.

### Task 1 – The Reproductive System

Label the diagrams of the male and female reproductive systems below:



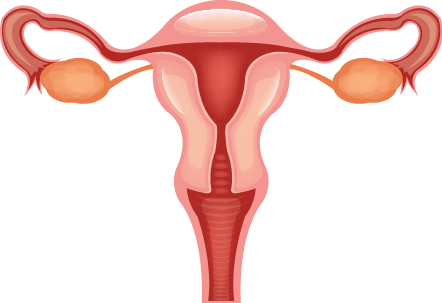
2 penis

3 urethra

4 scrotum

1 sperm duct

5 testes



6 fallopian tubes

7 ovary

8 cervix

9 vagina

11 uterus

10 uterus lining

Using the diagrams, write the number of the correct reproductive part next to each statement below:

5

* Where sperm is made

7

* Eggs are released from here once a month

1

* Carries sperm from testis to urethra

2

* Becomes erect and sperm is ejaculated

10

* A fertilised egg will implant here

6

* An egg may be fertilised by a sperm here

10

* This breaks down and is shed during a menstrual bleed

### Task 2 – The Menstrual Cycle

Ovulation

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

The menstrual cycle lasts approximately 28 days.

On the 28 day cycle above

* Colour the days a menstrual bleed occurs in RED
* Colour the days the uterus lining builds up and thickens YELLOW
* Draw an ARROW pointing to the day an egg is released from an ovary.
  + Label the arrow with the name of this process.
* Colour the days when the uterus lining stays thick in case a fertilised egg arrives in GREEN

### Task 3 – Fertilisation, Gestation and Birth

Below are the answers to some questions. Write down a possible question for each answer.

Learners may come up with a number of different questions. Below are some examples.

| **Question** | **Answer** |
| --- | --- |
| Name the process where the sperm nucleus and egg nucleus fuse together. | Fertilisation |
| When the fertilised egg becomes a small ball of cells, what is it called? | Embryo |
| What does the embryo turn into after 9 or 10 weeks? | Foetus |
| What is the function of the amniotic fluid? | Acts as a shock absorber |
| What passes from the mother's blood into the blood of the foetus at the placenta? | Oxygen and food/nutrients |
| Does the blood of the foetus and the blood of the mother mix in the placenta? | No, they don't mix |
| What causes the contractions that pushes the baby out at birth? | Muscles in the uterus wall |

### Task 4 – Puberty

Answers to the card sort:

| **Boys** | **Girls** | **Both** |
| --- | --- | --- |
| Voice deepens | Breasts develop | Body shape changes |
| Testicles produce sperm | Hips widen | Weight gain |
| Penis increases in length and width | Periods start | Mood swings and irritability |
| Testicles become larger and fuller | Ovaries start releasing eggs | Spots form on skin |
|  |  | Hair grows on face, underarms and genitals |
|  |  | Sweat more |
|  |  | Emotional changes |
|  |  | Sex hormones produced |

|  |  |
| --- | --- |
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## Learner Activity

### Task 1 – The Reproductive System

**The Reproductive System - Keywords**

Learners could use the words below to label the diagrams of the male and female reproductive systems or do this from their existing knowledge without the list:

**Testes Penis**

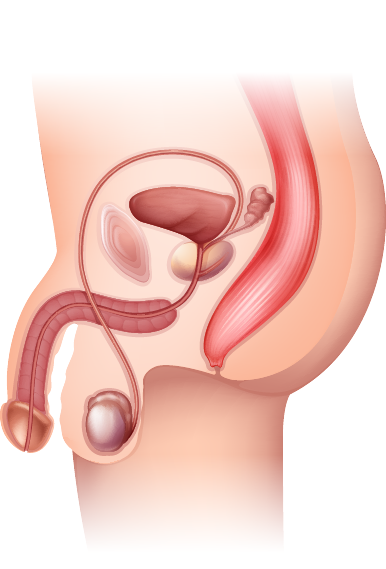
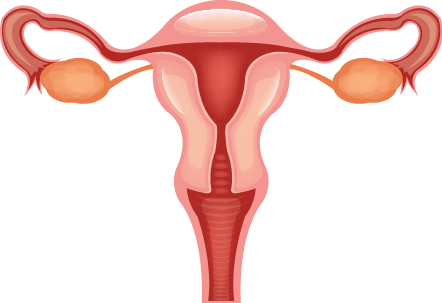
**Urethra Ovary**

**Uterus Fallopian tube**

**Cervix Scrotum**

**Sperm duct Uterus lining**

**Vagina**



6.

7.

8.

9.

11.

10.

5.

4.

3.

2.

1.

Using the diagrams, write the number of the correct reproductive part next to each statement below:

* Where sperm is made
* Eggs are released from here once a month
* Carries sperm from testis to urethra
* Becomes erect and sperm is ejaculated
* A fertilised egg will implant here
* An egg may be fertilised by a sperm here
* This breaks down and is shed during a menstrual bleed

### Task 2 – The Menstrual Cycle

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
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The menstrual cycle lasts approximately 28 days.

On the 28 day cycle above

* Shade in the days a menstrual bleed occurs.
* Draw dots on the days the uterus lining builds up and thickens.
* Draw an ARROW pointing to the day an egg is released from an ovary.

Label the arrow with the name of this process.

* Draw stripes on the days when the uterus lining stays thick in case a fertilised egg arrives.

### Task 3 – Fertilisation, Gestation and Birth

Below are the answers to some questions. Write down a possible question for each answer.

| **Question** | **Answer** |
| --- | --- |
|  | Fertilisation |
|  | Embryo |
|  | Foetus |
|  | Acts as a shock absorber |
|  | Oxygen and food |
|  | No, they don't mix |
|  | Muscles in the uterus wall |