

### Lesson 1: Similarities and Differences - Reproductive Organs

#### Learning Objectives

To recognise the main organs of the bodies of humans including scientific names for reproductive organs

To identify the differences between men and women.

#### Resources

Diagrams of main organs of the body

Smaller diagrams of the organs, their names and explanation of their function

#### Plenary

Pictures of three adult males and three adult females

Magazines if needed.

#### Points to Note

Links to science curriculum

#### Key Vocabulary

Lungs, heart, brain, kidney, stomach, penis, testicle, vagina, ovary

#### Starter Activity

Begin session in a circle, with diagrams of various organs of the body on the floor in the middle. Invite children to pick up an organ they recognise and say what they know about it, such as its function and its position in the body.

Include a diagram of the female and the male reproductive systems. Discuss some of the physical differences between men and women and ensure that the children are aware of the appropriate scientific language.

#### Activity

Children return to their tables where there are three sets of cards per pair/small group (diagram; organ name; organ function). Children are tasked with matching the diagrams to their names and functions. They can then stick these on a worksheet or on an outline of a human body (perhaps A3 size).

#### Plenary

Bring whole class back together and share with children pictures of three males, then three females.

What do they notice? Can they identify any particular differences between the two genders? e.g. more facial hair, wider shoulders, men are generally taller, women generally have smaller hands, etc.

Ask the children to consider whether men and women sometimes behave differently. Reinforce here that all humans are unique and, whilst some generalisations can be made, we are all different shapes and sizes.



### Lesson 2: Types of Love



#### Learning Objectives

To understand that there are different types of love

#### Resources

##### Starter

Post-its

##### Activity 2

Love is...



#### Starter Activity

Write the word LOVE on the board. Give out post-it notes and ask the children to write down words/phrases about what love is/ means to them. Discuss their ideas. How do we show love? Discuss showing love, respect and other values in a relationship.

#### Activity 1

The children can write a poem entitled 'Love is...' They may include all the different types of love they can think of, using the ideas from the starter activity for inspiration.

#### Activity 2

Love is... activity sheet to complete in pairs or individually.

Encourage them to think about ways love is shown through caring for another person and wanting the best for them, rather than materialistic love.

#### Plenary

Share the children's ideas. This could be made into a class display.

### Lesson 3: Personal Hygiene - Hand Washing



#### Learning Objectives

To understand how infection can spread

To understand how to prevent the spread of infection through good personal hygiene practices

#### Resources

N.B. e-Bug worksheets are available on the accompanying disc or on the e-Bug website:

[http://www.e-bug.eu/junior\\_pack.aspx?cc=eng&ss=2&t=Hand%20Hygiene](http://www.e-bug.eu/junior_pack.aspx?cc=eng&ss=2&t=Hand%20Hygiene)

#### Activity 1

HAND SW1

HAND SW2

Soap, paper towels, basins, water, oil based glo gel, UV torch

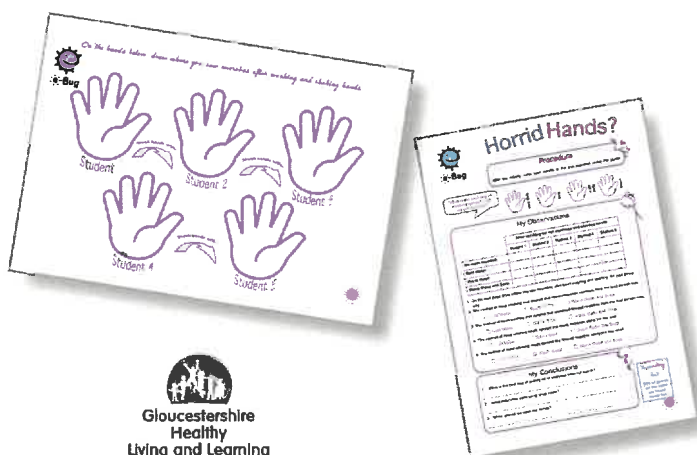
#### Points to Note

Identify any children who may have allergies or sensitive skin conditions

Covering a child's hand with glitter, and having them shake hands with other children, can demonstrate the theory behind the transference of microbes if the glo gel and UV torch aren't available

#### Key Vocabulary

Antibacterial, microbes, symptom, transmission, contagious, hygiene, infection



#### Starter Activity

Ask the children how many of them have washed their hands today. When/why did they wash them? What would happen if they don't wash their hands after going to the toilet, before eating, etc? Show them the word MICROBES. Do they know what microbes are, or any information about them?

#### Activity 1

Divide the class up into four separate groups and ask each child to stand in a row, one behind the other. Cover the first child's hands in Glo Gel and ask them to wash their hands according to the group they are in: A. No hand washing; B. Hands washed in cold water; C. Hands washed in warm water; D. Hands washed in warm water with soap. The first child then shakes hands with the second child (it is important that they shake hands firmly and well). The second then shakes hands with the third person and so on until everyone in the group has shaken hands with the person in front of them. When the task is complete, turn down the lights and shine the UV lamp over everyone's hands, starting with group A. Ask the children to complete their sheets (SW 1 and SW 2). Which results did they find the most surprising? Explain that the soap removes the oil in the skin which the microbes use to stick to and hide in. Children can complete the conclusion questions on the sheet.

If you don't have the resources to do this in school, watch [www.e-bug.eu/junior\\_pack.aspx?cc=ie\\_eng&ss=2&t=Hand%20Hygiene](http://www.e-bug.eu/junior_pack.aspx?cc=ie_eng&ss=2&t=Hand%20Hygiene) and discuss the experiment with your class.

#### Activity 2

[www.e-bug.eu/menupage.html?type=games&level=junior](http://www.e-bug.eu/menupage.html?type=games&level=junior)  
Games around the topic of microbes

#### Plenary

Do they know of any other way microbes can be spread? (Some diseases are airborne and spread in tiny droplets of mucus and water coughed and sneezed by people)





## Lesson 4: Personal Hygiene - Infection



### Learning Objectives

To understand that our bodies have three main lines of natural defence

To understand that sometimes the body needs help to fight infection

### Resources

N.B. e-Bug worksheets are available on the accompanying disc or on the e-Bug website:

[www.e-bug.eu/junior\\_pack.aspx?cc=eng&ss=2&t=Immunity](http://www.e-bug.eu/junior_pack.aspx?cc=eng&ss=2&t=Immunity)

#### Activity 1

IMM SH1 (for teacher's info as Upper KS2 level)

The Body's Defence System

#### Activity 2

[www.e-bug.eu/junior\\_pack.aspx?cc=eng&ss=2&t=Vaccinations](http://www.e-bug.eu/junior_pack.aspx?cc=eng&ss=2&t=Vaccinations)

VAC SH1

VAC SW1

### Points to Note

Some children may be aware that their parents have chosen not to have them immunised

### Key Vocabulary

Antibodies, immune, infection, inflammation, white blood cell, disease, vaccination

### Starter Activity

Remind children of last session's work on microbes and preventing their spread. Elicit ways we can help prevent the spread of harmful microbes.

### Activity 1

Elicit ways our bodies protect us from the microbes which we DO come into contact with. Discuss responses. Share a picture of the human body and identify the four ways our bodies prevent the entry of microbes (skin; mucus; tears; stomach acid). Briefly share with them the second and third lines of defence through the animations [www.e-bug.eu/junior\\_pack.aspx?cc=eng&ss=2&t=Immunity](http://www.e-bug.eu/junior_pack.aspx?cc=eng&ss=2&t=Immunity)

(N.B. This is fairly complex but can be briefly described) Children complete the activity sheet.

### Activity 2

Building on their work in Activity 1, reinforce that our immune system generally fights any harmful microbes that may enter our body. By taking good care of ourselves we help our immune system work properly and prevent infection. But vaccines are a further way we can fight microbes; vaccines are used to prevent not cure.

Share the story of Edward Jenner VAC SH1 and complete the comprehension together.

### Activity 3

Ask children to design posters to display around school promoting prevention of infection/spreading of microbes. Which rules/effective messages/catch phrases can they include? (catch it, bin it, kill it; 90% of microbes on hands are under the nails, etc.)

### Plenary

Check understanding through key questions:

What are vaccines? When should vaccines be used?

Ensure children understand that not all microbes are harmful

