

## Your Skin - Your Protection from the World

In this unit, pupils explore the role and functions of the skin. They look closely at their own skin as a beginning step to learning about its structure. They find out about common skin disorders and about the skin products that we use everyday. There is the opportunity to debate the role of animal testing. The unit concludes with pupils drawing up their own recommendations for healthy skin.

### Key Questions

- 1 [What information does someone's skin give you?](#)
- 2 [What jobs does your skin do?](#)
- 3 [How sensitive is your skin?](#)
- 4 [What is the structure of the skin?](#)
- 5 [What can go wrong with skin?](#)
- 6 [What products do we use on our skin?](#)
- 7 [What have you learned in this unit?](#)

<b>Developing Pupils' Knowledge, Understanding and Skills</b>
Research scientific information from a range of sources
Develop a range of practical skills, including the safe use of science equipment
Learn about: Organisms and Health – Healthy body and mind
<b>Developing Pupils' Thinking Skills and Personal Capabilities</b>
<ul style="list-style-type: none"><li>• generating questions</li><li>• developing and supporting an argument</li><li>• justifying opinions (Thinking, Problem-Solving, Decision-Making)</li> <li>• researching a topic</li><li>• judging the usefulness of information (Managing Information)</li></ul>

## What information does someone's skin give you?

### Learning Intentions Pupils are learning...

### Possible Learning, Teaching and Assessment Activities

...about how information can be managed to appeal to our feelings/grab our attention.

...to think more deeply about what can be told about someone from their skin.

Activity: What does this picture tell you about skin? ([attached resource sheet](#)).

Pupils look at a picture of damage caused by the sun to skin.

They consider the following 'Thinking Questions' in relation to the picture (in order to encourage pupils to make careful observations and thoughtful interpretations, stimulating curiosity).

- What do you see?
- What do you think about it?
- What does it make you wonder?

Pictures like these have been used in advertising campaigns. What kind of product would it be used to advertise? Why?

What information can a person's skin give you?

Pupils think of possible answers and share them, for example:

- If someone is:
  - hot or cold?
  - embarrassed?
  - tired or wide awake?
  - an outdoor or indoor person?
  - healthy or ill?
- Age of a person.

What other messages does a person's skin give you?

What does healthy skin look like?

## What jobs does your skin do?

**Learning Intentions**  
**Pupils are learning...**

**Possible Learning, Teaching and Assessment Activities**

...about functions of the skin.

What do pupils already know about skin?

Pupils brainstorm what they know about their skin and its functions. Guided by the teacher, pupils decide if and how to group this information.

Pupils can record what they know about the skin already in a KWL\* grid.  
(This will help build upon prior knowledge and help structure a sequence for learning more about the skin).

In the **K** column, they complete what they know already.

In the **W** column, they write what they want to find out about the skin.

At the end of the unit, pupils will return to this grid to fill in what they have learned in the **L** column.

Pupils could then do a Carousel\* activity to collectively generate and build up information about the following functions of the skin:

- protection
- controlling body temperature
- as a sense organ

Teacher summarises pupil input on each sheet of the carousel, where necessary correcting pupil input.

Teacher may choose to give pupils further information about the functions of the skin.



What is the structure of the skin?	
Learning Intentions Pupils are learning...	Possible Learning, Teaching and Assessment Activities
<p>...to make and record observations.</p> <p>...about the structure of the skin.</p> <p>...to consolidate findings and draw conclusions.</p> <p>Thinking, Problem-Solving, Decision-Making</p>	<p><u>Practical activities</u> The following activities involve the pupils looking more closely at skin, particularly their own. Teachers may choose and adapt as appropriate for the class. Groups in the class could do different activities and report their findings back to the class.</p> <ul style="list-style-type: none"> <li>• Pupils examine their skin using a magnifying glass. The aim of this activity is to encourage them to look more closely at something they take for granted and feel that they know about already.  Sketch and/or discuss what they see. Look at and sketch hairs and freckles; also, if present, any moles, blackheads, pimples, scars, birthmarks. Where is their skin thickest or thinnest?</li> <li>• Skin Prints Skin prints are like finger prints but taken from other parts of the body like the wrist, elbow, palm, knuckle and knee. Pupils discuss possible ways to take a skin print. One method is described below:  Make a pencil smudge by rubbing a pencil back and forth on paper. Rub, for example, the wrist in the pencil smudge until it is black. Place some tape on the wrist and then lift off gently. The tape will have a skin print. Tape it to a piece of paper and label. Then wash skin with soap and water. Pupils can compare their skin prints and describe similarities and differences.  Alternatively, an ink pad could be used for this activity but may be messier to carry out and to clean up afterwards..</li> <li>• Pupils colour in a diagram of the skin from an anatomical colouring book.</li> </ul> <p>Pupils report back to the class what they have learned from these activities:</p> <ul style="list-style-type: none"> <li>• What do their observations tell them about the skin?</li> <li>• Do the observations of all groups (possibly doing other activities) support each other? Can connections be made between the observations of different groups? If there are differences, can these be explained?</li> <li>• What conclusions can the class draw about the skin?</li> </ul>

## What can go wrong with skin?

Learning Intentions Pupils are learning...	Possible Learning, Teaching and Assessment Activities
<p>...to identify and extract the key facts about a topic. <b>Managing Information</b></p> <p>...to summarise, share and talk about what they have found out. <b>Managing Information</b></p>	<p><b>Advance teacher preparation required!</b> (Teacher needs to have arranged <u>information corners</u> on a number of skin disorders - about 4- 6 different disorders depending on size of class - school librarian could be helpful in sourcing books - also keep an eye out for newspaper and magazine articles).</p> <p><u>Class Discussion</u> How and why skin can become unhealthy</p> <p>Pupils list disorders that can affect the skin. Examples include: acne, skin cancer, eczema, psoriasis, cold sores, ulcers, warts, hives, athlete's foot, etc.</p> <p>Pupils arrange themselves into groups. Each member of the group chooses a skin disorder on which to research and become an expert.</p> <p>Class rearrange into the expert groups at each information corner and spend time finding out as much as they can about the disease. The information in each corner will come from a number of sources. Pupils comment on the usefulness of the different pieces of information and attempt to identify the various sources. In order to become an expert, they must evaluate and synthesis information from different sources.</p> <p>They then return to the original groups - sharing information and taking questions on the disease in which they have become an 'expert'. <b>Opportunity to develop/assess Communication</b></p> <p>This activity needs to be completed with a class debriefing chaired by the teacher. There may be further questions which need to be explored.</p>

What products do we use on our skin?	
Learning Intentions Pupils are learning...	Possible Learning, Teaching and Assessment Activities
<p>...to think critically about information given. <b>Managing Information</b></p> <p>...to develop supporting arguments. ...to consider counter-arguments. <b>Thinking, Problem Solving, Decision Making</b></p>	<p><u>Questions to Consider</u></p> <p>What products do we put on our skins? Why? How do we know that they work? How do we know that they are safe?</p> <p>Pupils bring in some skin products and look at ingredients on the labels. What are the different terms used on skin products? What do they mean? What does the label tell us? What does it not tell us? What kind of language does the label use? Why? How useful is the information on the label?</p> <p>Useful resource for exploring how adverts can be misleading: <a href="http://www.bbc.co.uk/sn/tvradio/programmes/horizon/broadband/tx/beautyparlour/spotthecatch">http://www.bbc.co.uk/sn/tvradio/programmes/horizon/broadband/tx/beautyparlour/spotthecatch</a></p> <p><u>Challenge</u> Design a skin care label that tells you what the product does and convinces you to buy it. Pupils decide on success criteria, guided using the products that they have brought in.</p> <p><u>Class Debate</u> Is animal testing justified in developing skin products? Consider:</p> <ul style="list-style-type: none"> <li>• What could happen if companies could sell products that didn't have to be tested for safety?</li> <li>• What are the alternatives to animal testing?</li> </ul> <p>Pupils prepare for the debate by:</p> <ul style="list-style-type: none"> <li>• stating their opinions;</li> <li>• using evidence to support their opinions;</li> <li>• considering possible counter-arguments in advance; and addressing these.</li> </ul>

What have you learned in this unit?	
Learning Intentions Pupils are learning...	Possible Learning, Teaching and Assessment Activities
<p>...to blend new information with what they knew already.</p> <p>...to clearly communicate a message.</p>	<p>Return to the KWL grid started at the beginning of this unit. Pupils fill in what they have learned. (Alternatively, this could be done after each key question has been visited).</p> <p>Pupils make a list of 10 actions for healthy skin. This could be:</p> <ul style="list-style-type: none"> <li>• a written list, compiled individually or as a group.</li> <li>• a presentation.</li> <li>• a video message.</li> <li>• a sound recording, etc.</li> </ul> <p>Opportunity to develop/assess Communication</p>

\* This strategy is outlined in [Active Learning and Teaching Methods for Key Stage 3](#) (CCEA:2007).

## Resource Sheet



Picture source: <http://www.vita-matrix.com/images/tzonesundamage.jpg>

Links with Key Elements	Links with Learning for Life and Work
Personal Health  Media Awareness  Ethical Awareness	Personal Development Key Concept: Personal Health
<b>Development of Learning Outcomes</b>	
<ul style="list-style-type: none"> <li>• <b>demonstrate a range of practical skills in undertaking experiments, including the safe use of scientific equipment</b></li> <li>• <b>use investigative skills to explore scientific issues, solve problems and make informed decisions;</b></li> <li>• <b>research and manage information effectively, using Mathematics and using ICT where appropriate;</b></li> <li>• <b>show deeper scientific understanding by thinking critically and flexibly, solving problems and making informed decisions, using Mathematics and using ICT where appropriate;</b></li> <li>• <b>work effectively with others;</b></li> <li>• <b>communicate effectively in oral, visual, written, mathematical and ICT formats, showing clear awareness of audience and purpose.</b></li> </ul>	