

4th Grade Science Lesson Plan

Week 5- Keeping Healthy

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| Year 5 | <p>WEEKLY OBJECTIVES MOST students will be able to:</p> <ul style="list-style-type: none"> • Recognise that the heart is a muscle that pumps blood around the body, contracting regularly, via blood vessels. The heart and lungs are protected by the ribs. • Measure their pulse rate and relate it to heart beat • Repeat measurements of pulse rate <p>Extension Objectives:</p> <ul style="list-style-type: none"> • Arteries = carry oxygenated blood away from the heart to body parts; Veins = carry de-oxygenated blood to the heart from body parts. • Know parts of the heart such as right and left ventricles, atrium, etc. and the fact that the left side of heart is bigger than the right. | | |
| | Introduction | Task | Reflection |
| Lesson 1 | <p>Using skeleton model of human body and photos on Smart Board, locate the heart and lungs within the rib cage. Show children a model of a heart to show size, vessels and thickness of the walls. Show real sheep's (preserved in formaldehyde) heart from Secondary Science Lab.</p> | <p>Explain that the muscle in the walls of the heart contracts regularly, pumping blood around the body.</p> <p>Using models or video (smart board video file) demonstrate to children that the heart pumps the blood to all parts of the body where it is needed <i>eg muscles, brain, lungs</i>. (Show poster of arteries and veins pumping blood around the body.)</p> <p>Students will draw a diagram of the heart in their notebooks (found in the student textbook, "Keeping Healthy").</p> | <p>Students describe <i>eg through making annotated drawings</i> that the heart pumps blood round the body and identify some parts of the body <i>eg lungs, brains, muscles</i> through which blood flows.</p> |
| Lesson 2 | <p>Ask children about the relationship between heart beat and pulse. Explain to children that pulse rate is measured as beats per unit time (minute).</p> <p>Explain how to use stopwatch and stethoscopes.</p> <p>Have calculators available to assist students in multiplying 2-digit numbers by 6.</p> | <p>Show children how to find their pulse on wrist, temple and neck using 2 fingers. Then pass out stethoscopes and show students how to listen for heart beat on chest (in same-sex pairs).</p> <p>Have students measure their resting pulse rate and ask them to take and record their own several times using a stop watch and fingers or stethoscopes. Students work in pairs to count beats every 10 sec and multiply by 6 to get number of beats/minute.</p> | <p>Ask children to suggest why they didn't get the same result each time and why it is important to make several measurements. Ask them to take the average result they think is most accurate and share it with the class. Students will record their "resting heart rate" in notebooks.</p> <p>(Take heart rate during and after exercise in P.E. class on WED.)</p> |

Resources:

Heart model, sheep heart, poster of arteries/veins in body, human skeleton model, pictures of heart/lungs/ribs, stopwatches, calculators, stethoscopes, students textbook, "Keeping Healthy".