Term 3, 2014 Inquiry Unit

Sport Science

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Through lines:
1. The way we see, think and feel about ourselves has an effect on the way we live, behave and relate to others.
2. Science, technology and our knowledge about the physical world are constantly evolving.
3. Scientific and technological processes enable us to investigate questions and problems and find possible solutions. The results can have implications for all living things and the environment.
4. We can take responsibility for our own physical, mental, social and emotional health and well-being, and contribute to that of others.


Science Understanding

Physical Science
Level 3–4: Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076)

Science as a Human Endeavour
Nature and development of Science
Level 3–4: Science involves making predictions and describing patterns and relationships (ACSHF061)
Level 5: Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHF081) Important contributions to the advancement of science have been made by people from a range of cultures (ACSHF082)

Use and Influence of Science
Level 3–4: Science knowledge helps people to understand the effect of their actions (ACSHF062)
Level 5: Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples’ lives (ACSHF083) Scientific knowledge is used to inform personal and community decisions (ACSHF217)

Science Inquiry Skills

Planning and conducting levels 3–5
Suggest ways to plan and conduct investigations to find answers to questions (ACSIS054)

Safely use appropriate materials, tools or equipment to make and record observations, using formal measurements and digital technologies as appropriate (ACSIS055)

With guidance, plan appropriate investigation methods to answer questions or solve problems (ACSIS086)

Decide which variable should be changed and measured in fair tests and accurately observe, measure and record data, using digital technologies as appropriate (ACSIS087)

Processing and analysing data and information Levels 3–5

Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate (ACSIS090)

Compare data with predictions and use as evidence in developing explanations (ACSIS918)

Evaluating Levels 3–5

Reflect on the investigation, including whether a test was fair or not (ACSIS098)
Suggest improvements to the methods used to investigate a question or solve a problem [ACSIS091]

Communicating Levels 3-5

Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports including multi-modal texts [ACSIS060]

Questioning and predicting Levels 3-5

With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge [ACSIS064]

Health and Physical Education

They identify healthy eating practices and explain some physiological, social, cultural and economic reasons for people’s food choices.

They participate regularly in physical activities for the purpose of improving skill and health, and identify and describe the components of health-related fitness

Understandings:

- Everyday activities affect our health and well-being in both positive and negative ways.
- We can take steps to improve our personal health through making good choices.
- There are many parts of the body all of which have their own role, which work together to keep us functioning.
- Forces affect the behaviour of an object during physical action.

Focus Questions:

1. How do everyday activities affect our health and well-being?
2. What steps can we take to improve our personal health?
3. How does the body work?
4. What forces are at work when we do physical activity?

Contributing Questions:

1. How can we take responsibility for our own physical, mental, social and emotional health and well-being?
2. How does science and technology affect the world we live in?

Key Concepts:

- forces, power, health, food, physical, behaviour, training, practice, well-being, change, balance, technology, decisions

Cognitive Skills:

- predicting, understanding, explaining, prior knowledge, making connections, recording, reflecting, proving, testing, trialling

Interpersonal and Personal Skills:

- persevering, collaborating, encouraging, discussing, sharing, asking, answering, supporting, empathy, personal goals, leadership, team work, kindness, guidance, control