Shuqun Primary

SCIENCE DEPARTMENT

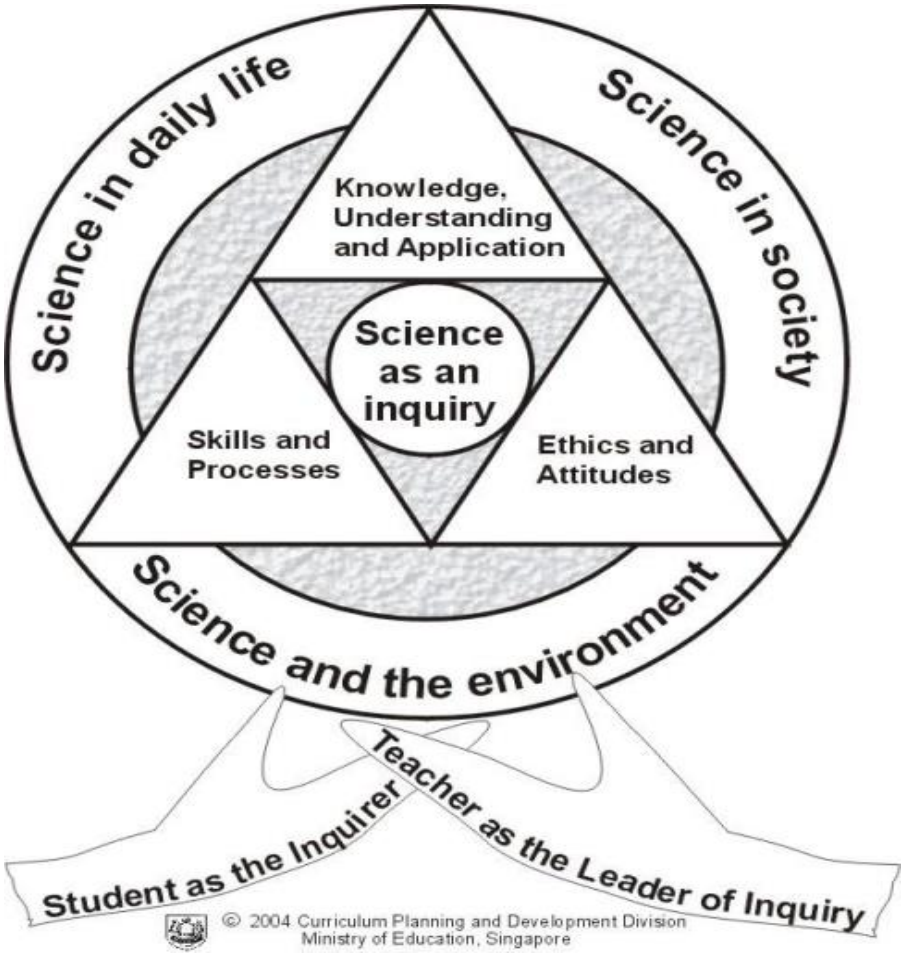
Primary 4

Briefing on Subject Based Banding

Outline

- Overview of Primary Science Syllabus
- Assessment Objectives
- How you can support your children's learning

OVERVIEW OF SCIENCE CURRICULUM FRAMEWORK



www.moe.gov.sg/docs/default-source/document/education/syllabuses/sciences/files/science-primary-2014.pdf

PRIMARY SCIENCE SYLLABUS

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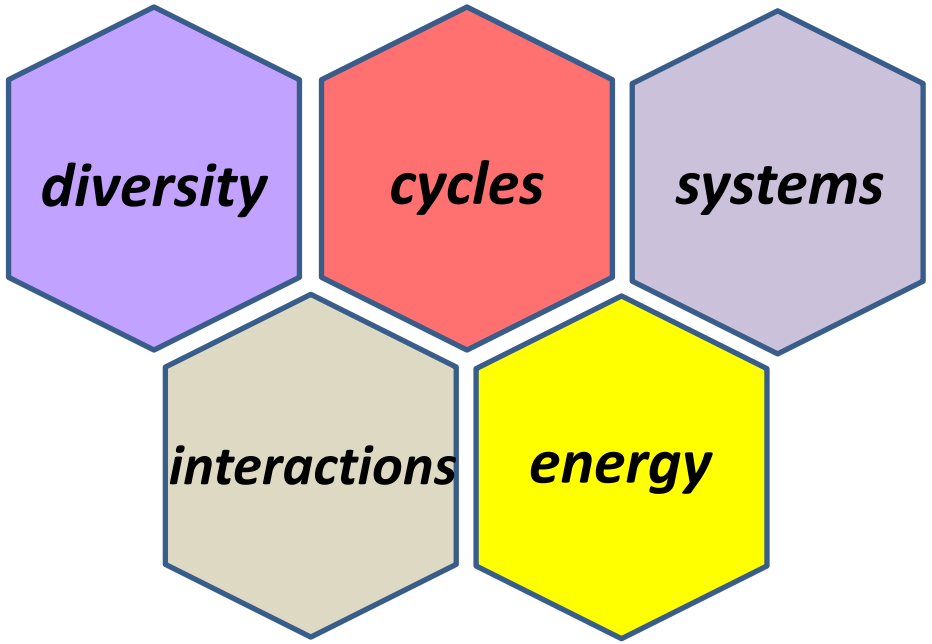
Themes in Primary Science



Life Science

Physical Science

SYLLABUS COVERAGE (P3 – P6)

Themes	Life Science	Physical Science
Diversity	• Diversity of living and non-living things	• Diversity of materials
Cycles	• Cycles in plants and animals (Life cycles) • Cycles in plants and animals (Reproduction)	• Cycles in matter and water (Matter) • Cycles in matter and water (Water)
Systems	• Plant system (Plant parts and functions) • Human system (Digestive system) • Plant system (Respiratory and circulatory systems) • Human system (Respiratory and circulatory systems) • Cell system	• Electrical system
Interactions	• Interaction within the environment	• Interaction of forces (Magnets) • Interaction of forces (Frictional, gravitational, springs)
Energy	• Energy forms and uses (Photosynthesis)	• Energy forms and uses (Light) • Energy forms and uses (Heat) • Energy Conversion

SYLLABUS COVERAGE (P3 – P4)

Themes	Life Science	Physical Science
Diversity	• Diversity of living and non-living things	• Diversity of materials
Cycles	• Cycles in plants and animals (Life cycles)	• Cycles in matter and water (Matter)
Systems	• Plant system (Plant parts and functions) • Human system (Digestive system)	
Interactions		• Interaction of forces (Magnets)
Energy		• Energy forms and uses (Light) • Energy forms and uses (Heat)

ASSESSMENT FORMAT

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The end-of-year examination consists of one written paper comprising two booklets, Booklet A and Booklet B.

Booklet	Item Type	Number of Questions	Number of marks per question	Marks
A	Multiple-choice	30	2	60
B	Structured /Open-ended	14	2, 3	40
Total: 100 marks				

Duration of Paper: 1 hour and 45 minutes

Students can attempt any of the booklets first.

ASSESSMENT OBJECTIVES

Assessment Objectives	Weighting
Basic Questions (MCQ & Structured Questions)	**30%**
Knowledge with Understanding *(K/U)* Demonstrate knowledge and understanding of fundamental scientific facts, concepts and principles.	20%
Application of Knowledge and Process Skills *(A)* Apply scientific facts, concepts and principles to new situations. • Use one or a combination of **process skills**.	50%

- Inferring
- Predicting
- Analysing
- Evaluating
- Generating Possibilities
- Formulating Hypothesis
- Communicating

ITEM TYPE:MULTIPLE-CHOICE QUESTION (BASIC)

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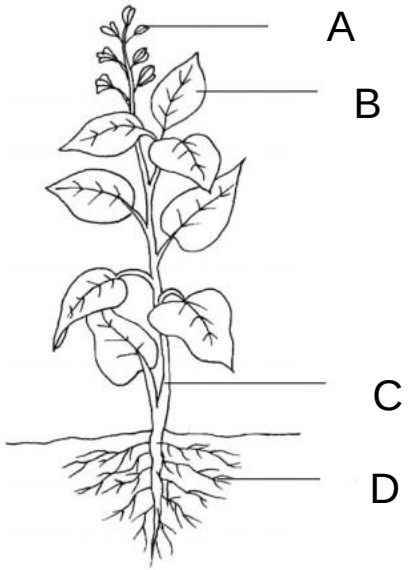
Study the diagram below.



Which one of the parts, A, B, C or D, keeps the plant upright?

(1) A
(2) B
(3) C
(4) D

ITEM TYPE: MULTIPLE-CHOICE QUESTION

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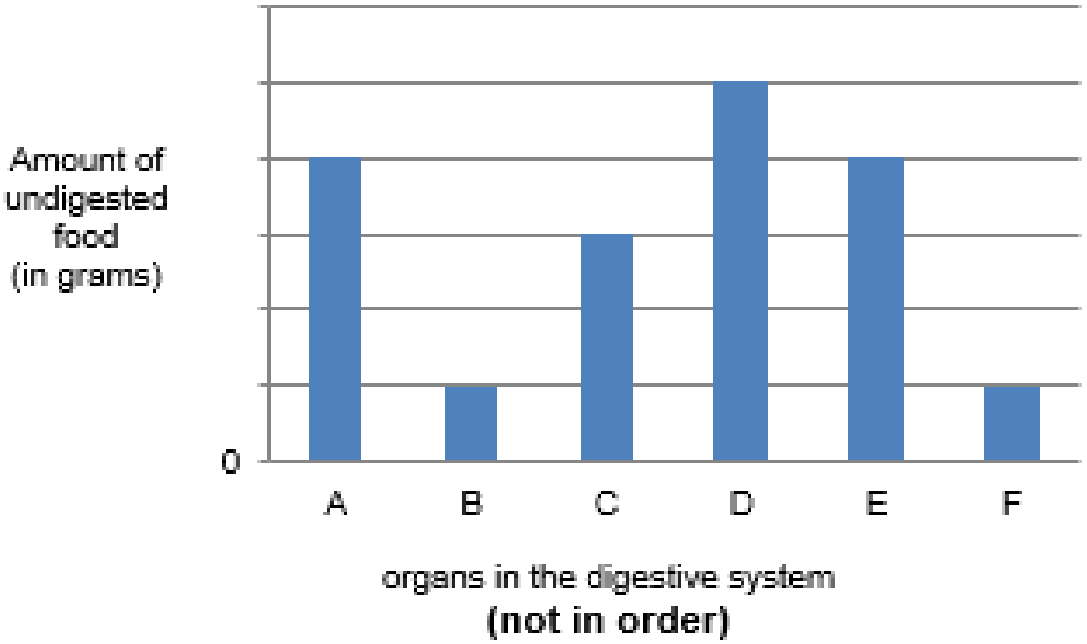
Marco ate some food during lunch. The graph below shows the amount of undigested food left in each organ in Marco's digestive system.



His food went through the digestive system. Which one of the following shows the **correct order** of organs in the digestive system that his sandwich went through?

(1) D → E → A → C → F → B

(2) D → B → F → C → E → A

(3) B → F → C → A → E → D

(4) B → F → A → C → E → D

ITEM TYPE: STRUCTURED QUESTION (BASIC)

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Sue observed and grouped some things as shown in the table. [2]

A	B
tiger	pen
mould	car
butterfly	fan

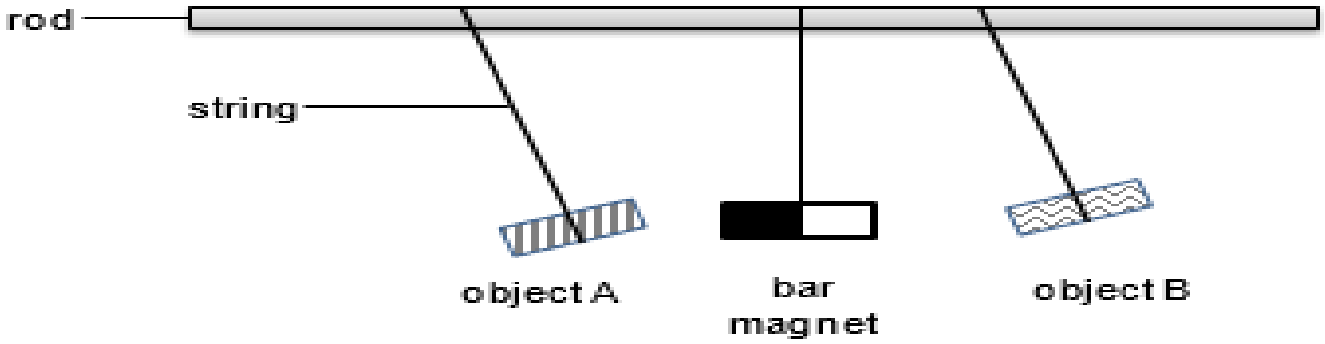
What are the suitable headings for groups A and B?

Group A: _____

Group B: _____

ITEM TYPE: OPEN-ENDED QUESTION

The diagram below shows a bar magnet and two objects, A and B, hung by a string beside each other.



(a) Yi Ling concluded that object A is attracted to the bar magnet. What did she observe to make that conclusion? [1]

_____

_____

(b) Suggest a material that object A could be made of. [1]

_____

(c) Based on the diagram above, is object A or object B a magnet? Explain your answer. [1]

_____

RISE Strategy

(Multiple-Choice Questions)

Read the question carefully. Study the given diagrams, tables or graphs.

Identify concepts being tested.

Study all the options carefully.

Eliminate distractors to arrive at the best possible answer.

RISE Strategy

(Open-Ended Questions)

Read the question carefully. Study the given diagrams, tables or graphs.

Identify concepts being tested.

Select relevant concepts to answer the question. Check mark allocation and answer to the point.

Express and **explain** your answer clearly.

STRATEGIES TO ANSWERING Open-Ended QUESTIONS

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Common Exam Words / Phrases /Questions

- **Short and concise answers are usually required when the question has any of these words (e.g. state, identify, list, give an example, name)**
  - **No explanation is required**

- **Longer answers are usually required when the question has any of these words (e.g. explain, why, infer, describe, conclude, give a reason)**
  - **Relevant details required. Involve scientific reasoning and reference to science concepts. DO NOT give one or two word answers.**

COMMON OBSERVATIONS

- Students have **difficulty identifying concepts** required to answer questions.

- Students‘ answers are **not clear and comprehensive**, lacking in scientific reasoning.

SUPPORTING YOUR CHILD IN SCIENCE

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- **Develop the love of science** in your child by encouraging their questions and relating science concepts to daily phenomenon.
- **Strengthen your child's conceptual understanding** by supporting your child to do the following:
    - Revising Primary 3 and 4 topics
    - Organising notes using concept/mind maps.
    - Using the scientific language associated to science concepts.
    - Going through questions in activity books, topical worksheets and exam practice papers.
    - Attempting practice papers within the stipulated time.

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Thank You!

For further queries, you may consult your child's 

teacher!