



## Grade 6 Learning Outcomes

Below are the learning outcomes of the course stating what students are expected to know/be able to do upon completion of the course.

### Schoolwide Learner Outcomes

The 5 Steps Academy students develop the following global competencies (to the extent reasonable for their age group) to thrive in the unpredictable and fast-changing:

- Courage to try and make mistakes and the ability to learn from mistakes.
- Respect people regardless of their age, gender, nationality, religion, beliefs, or opinions.
- Discipline in self-development and achievement of dreams.

### Mathematics

By the end of the course students should be able to:

- Find two numbers based on sum, difference, product and quotient
- Solve Consumer Math questions:
  - Find percent of a number: GST, discount and more
  - Find the percent: discount and mark-up
  - Given sale prices: find the original price
  - Solve multi-step problems with percents
- Solve guess-and-check word problems
- Convert and compare metric units
- Solve distance, speed, and time word problems
- Graph integers on horizontal and vertical number lines
- Perform 4 operations with negative numbers
- Understand and apply properties of addition and multiplication.
- Identify equivalent linear expressions

### English

By the end of the course students should be able to:

#### *Vocabulary:*

Memorize and correctly apply the meanings of 1094 core words and 90 new phrasal verbs from the stipulated lists.

#### *Grammar:*

Master all the grammar skills learnt in previous grades.



## ***Reading***

- Able to read and analyse passages while taking into account the following factors. Reading a passage, be it prose, poetry, drama or formal writing, and understanding 1) theme, 2) tone, 3) subject matter, 4) purpose of text; while being able to draw relations within a) key words/word choice, b) topic sentences, c) sub-topic sentences and d) supporting sentences.

### ***Reading – word reading***

- apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in the tables in the syllabus both to read aloud and to understand the meaning of new words that they meet.

### ***Reading – comprehension***

- maintain positive attitudes to reading and understanding of what they read by:
  - continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
  - reading books that are structured in different ways and reading for a range of purposes
  - increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
  - recommending books that they have read to their peers, giving reasons for their choices
  - identifying and discussing themes and conventions in and across a wide range of writing
  - making comparisons within and across books
  - learning a wider range of poetry by heart
  - preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience
- understand what they read by:
  - checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
  - asking questions to improve their understanding
  - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
  - predicting what might happen from details stated and implied
  - summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
  - identifying how language, structure and presentation contribute to meaning
- discuss and evaluate how authors use language, including figurative language, considering the impact on the reader



- distinguish between statements of fact and opinion
- retrieve, record and present information from non-fiction
- participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
- provide reasoned justifications for their views.

### ***Writing***

- able to write 400 words for compositions with vividness and structure.
- plan their writing by:
  - identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
  - noting and developing initial ideas, drawing on reading and research where necessary
  - in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
- draft and write by:
  - selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
  - in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
  - précising longer passages
  - using a wide range of devices to build cohesion within and across paragraphs
  - using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
- evaluate and edit by:
  - assessing the effectiveness of their own and others' writing
  - proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
  - ensuring the consistent and correct use of tense throughout a piece of writing
  - ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
- proof-read for spelling and punctuation errors
- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.



## ***Spelling***

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters [for example, knight, psalm, solemn]
- continue to distinguish between homophones and other words which are often confused
- use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in the tables below
- use dictionaries to check the spelling and meaning of words
- use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary
- use a thesaurus.

## ***Public Speaking***

- Speak coherently and with ease in front of the school assembly.

## **Science**

By the end of the course students should be able to:

1. Identify a force as a push or a pull.
2. Show an understanding of the effects of a force.
  - a. a force can move a stationary object
  - b. a force can speed up, slow down or change the direction of motion
  - c. a force can stop a moving object
  - d. a force may change the shape of an object
3. Recognise and give examples of the different types of forces. magnetic force
  - a. gravitational force
  - b. elastic spring force
  - c. frictional force
4. Recognise that objects have weight because of the gravitational force acting on the object.
5. Identify the factors that affect the survival of an organism.
  - a. physical characteristics of the environment (temperature, light, water)



- b. availability of food
  - c. types of other organisms present (producers, consumers, decomposers)
6. Discuss the effect on organisms when the environment becomes unfavourable (organisms adapt and survive; move to other places or die).
7. Trace the energy pathway from the Sun through living things and identify the roles of various organisms (producers, consumers, predators, prey) in a food chain and a food web.
8. Differentiate among the terms organism, population and community.
  - a. an organism is a living thing.
  - b. a population is defined as a group of plants and animals of the same kind, living and reproducing at a given place and time.
  - c. a community consists of many populations living together in a particular place.
9. Show an understanding that different habitats support different communities (garden, field, pond, seashore, tree, mangrove swamp).
10. Recognise that adaptations serve to enhance survival and can be structural or behavioural.
  - a. cope with physical factors
  - b. obtain food
  - c. escape predators
  - d. reproduce by finding and attracting mates or dispersing seeds/fruits
11. Give examples of man's impact (both positive and negative) on the environment.
12. State that living things need energy to carry out life processes.
13. Recognise that the Sun is our primary source of energy (light and heat).
14. Differentiate the ways in which plants and animals obtain energy.
15. Recognise that energy from most of our energy resources is derived in some ways from the Sun.
16. Recognise and give examples of the various forms of energy.
  - a. kinetic energy
  - b. potential energy
  - c. light energy



- d. electrical energy
- e. sound energy
- f. heat energy

Students should be able to demonstrate the following practical skills:

1. Investigate the effect of friction on the motion of objects and communicate findings.
2. Investigate the effects of forces on springs and communicate findings.
3. Observe, collect and record information regarding the interacting factors within an environment.
4. Investigate the requirements (water, light energy and carbon dioxide) for photosynthesis (production of sugar and oxygen) and communicate findings.
5. Investigate energy conversion from one form to another and communicate findings.