



## Grade 4 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:

- Round whole numbers and decimals
- Choose numbers with a particular product
- Estimate products
- Estimate quotients: word problems
- Divide by two-digit numbers
- Choose numbers with a particular quotient
- Evaluate numerical expressions
- Add and subtract fractions with **like** denominators
- Add and subtract fractions with **unlike** denominators
- Multiply two fractions
- Find fractions of whole numbers
- Divide fractions
- Divide whole numbers and unit fractions
- Multiply and divide decimals by powers of ten
- Multiply decimals
- Divide decimals by whole numbers
- Division with decimal quotients

### English

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

#### ***Vocabulary:***

Memorize and correctly apply the meanings of 1117 core words, including 100 phrasal verbs from the stipulated lists.

#### ***Grammar:***



Revision - Identify and utilise the following grammatical features with proficiency:

- Quantifiers (*half, enough, plenty of, several*)
- Reciprocal Pronouns (*each other, one another*).
- Classification of pronouns:
  - Personal pronouns (*e.g., he, they*)
  - Demonstrative pronouns (*e.g., this, these*)
  - Interrogative pronouns (*e.g., which, who*)
  - Indefinite pronouns (*e.g., none, several*)
  - Possessive pronouns (*e.g., his, your*)
  - Reciprocal pronouns (*e.g., each other, one another*)
  - Relative pronouns (*e.g., which, where*)
  - Reflexive pronouns (*e.g., itself, himself*)
  - it's vs its, whose vs who's
- Adjectives. Quantity, quality, comparative form, superlative form (*as ... as, more careful, most careful, worse, worst*)
- Phrasal verbs (*hold back, back away, take up, tear off, act on, blow up, black out, stop over, stay over, tell apart, give off, fall apart, count on, dig into, draw back, drive off, drop off, cut down, get at, break into; Grade 3 - at least 100 phrasal verbs and Grade 4 - at least 200 phrasal verbs from the stipulated list*)
- New regular and irregular verbs (*send, forget, ring, lie/lay, ride, shake, bear, leave, find, lose, tell, swim, run, sleep, throw*)
- Conditionals (*simple present ... will, simple past ... would*)
- Modals (*must, mustn't, used to, dare*)
- Prepositions (*beneath, up to, next to, ahead of*)
- Connectors (*not only, as well as, besides, either ... or, neither ... nor, both ... and, not only ... but also, although, so that, thought, in order to, instead of, because of, unlike, except, in spite of, despite, while, whereas, as soon as, together with, nevertheless, as a result of, even though, provided, consequently, however, no matter, much as, owing to, due to*)
- Tag questions
- Word forms (*-ous*)
- Present perfect and present perfect continuous
- Past perfect
- Future perfect
- Future perfect in past
- Participles
- Subjunctive mood
- Subject-verb agreement (in number and tenses)
- Conditionals with all tenses.

**Reading – word reading**



- apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in the table below, both to read aloud and to understand the meaning of new words they meet
- read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.

### ***Reading – comprehension***

- develop positive attitudes to reading and understanding of what they read by:
  - listening to and discussing a 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
  - using dictionaries to check the meaning of words that they have read
  - increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
  - identifying themes and conventions in a wide range of books
  - preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
  - discussing words and phrases that capture the reader's interest and imagination
  - recognising some different forms of poetry [for example, free verse, narrative poetry]
- understand what they read, in books they can read independently, by:
  - checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
  - asking questions to improve their understanding of a text
  - 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
  - identifying main ideas drawn from more than one paragraph and summarising these
  - identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction
- participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.

### ***Writing***

- write 200-word compositions with vividness and structure.
- plan their writing by:



- discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
- discussing and recording ideas
- draft and write by:
  - composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (see the tables below)
  - organising paragraphs around a theme
  - in narratives, creating settings, characters and plot
  - in non-narrative material, using simple organisational devices [for example, headings and subheadings]
- evaluate and edit by:
  - assessing the effectiveness of their own and others' writing and suggesting improvements
  - proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- proof-read for spelling and punctuation errors
- read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.

### ***Spelling***

- use further prefixes and suffixes and understand how to add them (see the tables below)
- spell further homophones
- spell words that are often misspelt (see the tables below)
- place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]
- use the first two or three letters of a word to check its spelling in a dictionary
- write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.

### ***Handwriting***

- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

### ***Public Speaking***



- Speak coherently and with ease in front of an audience.

## Science

By the end of the course, students should master basic concepts and scientific terms about science to help them understand themselves and the world around them.

The main process skills are Observing, Comparing, Classifying, Communicating (diagrams, graphs and information) and inferring (interpreting data).

Students should be able to:

1. Identify the organ systems and state their functions in human (digestive, respiratory, circulatory, skeletal and muscular).
2. Identify the organs in the human digestive system (mouth, gullet, stomach, small intestine and large intestine) and describe their functions.
3. Identify the different parts of plants and state their functions, eg, leaf, stem and root.
4. Observe plant parts.
5. Recognise that a magnet can exert a push or a pull.
6. Identify the characteristics of magnets.
  - a. magnets can be made of iron or steel
  - b. magnets have two poles.
7. A freely suspended bar magnet comes to rest pointing in a North-South direction
  - a. unlike poles attract and like poles repel
  - b. magnets attract magnetic materials.
8. List some uses of magnets in everyday objects.



9. Compare magnets, non-magnets and magnetic materials.
10. Make a magnet by the 'Stroke' method and the electrical method.
11. Recognise that an object can be seen when it reflects light or when it is a source of light.
12. Recognise that a shadow is formed when light is completely or partially blocked by an object.
13. List some common sources of heat.
14. State that the temperature of an object is a measurement of its degree of hotness.
15. Differentiate between heat and temperature.
  - a. heat is a form of energy
  - b. temperature is a measurement of the degree of hotness of an object
16. Show an understanding that heat flows from a hotter to a colder object/region/place until both reach the same temperature.
17. Relate the change in temperature of an object to the gain or loss of heat by the object.
18. List some effects of heat gain/loss in our everyday life.
  - a. contraction / expansion of objects (solid, liquid and gas)
  - b. change in state of matter
19. Identify good and poor conductors of heat.
  - a. good conductors: metals
  - b. poor conductors: wood, plastics, air
20. Investigate the variables that affect shadows formed and communicate findings.



- a. shape, size and position of object(s)
- b. distance between light source-object and object-screen.

21. Measure temperature using a thermometer and a data-logger with temperature/heat sensors.