

Zahrat Al-Sahra'a International School

Grade 7 to 8 Entrance Exam

Required Lessons

Academic Year 2019-2020

Math

Algebra

- 1.1 -Variables and expressions
The Distributive Property
- 1.2 -Solving equations by adding and subtracting
- 1.3 -Solving equations by Multiplying and dividing
- 1.4 -Solving Two-step and Multi-Step Equations
- 1.5 -Solving equations with variables on both sides
- 1.6 -Solving for a variable
- 1.7 -Solving absolute value equations
- 1.8 -Rates, Ratios and proportions
- 1.9 -Applications of proportions
- 2.1 -Graphing and writing Inequalities
- 2.2 -Solving inequalities by adding or subtracting
- 2.3 -Solving inequalities by multiplying or dividing.
- 2.4 -Solving Two-Step and Multi-Step Inequalities
- 2.5 -Solving Inequalities with variables on both sides
- 2.6 -Solving Compound Inequalities
- 2.7 -Solving Absolute-Value Inequalities
- 3.1 -Graphing Relationships
- 3.2 -Relations and Functions
- 3.3 -Writing Functions
- 3.4 -Graphing Functions
- 3.6 -Arithmetic Sequences

- 4.1 -Identifying linear functions
- 4.2 -Using Intercepts
- 4.3 -Rate of Change and slope
- 4.4 -The Slope Formula
- 4.5 -Direct Variation
- 4.6 -Slope-Intercept Form
- 4.7- Point-Slope Form
- 4.9 -Slopes of parallel and perpendicular Lines

Geometry

- 1.1 -Understanding points, lines, and planes
- 1.2 -Measuring and constructing segments
- 1.3 -Measuring and constructing angles
- 1.4 -Pairs of angles
- 1.5 -Using Formulas in Geometry
- 1.6 -Midpoint and distance in the coordinate plane
- 3.1 - Lines and angles
- 3.2 -Angles formed by parallel lines and Transversals
- 3.3 -Proving Lines parallel
- 3.4 -Perpendicular Lines
- 3.5 -Slopes of lines
- 3.6 -Lines in the Coordinate plane

Arabic

- قراءة النَّصِّ .
- الإجابة على الأسئلة حول النَّصِّ + مرادفات وأضداد من خلال النَّصِّ .
- الأفعال الناقصة .
- الأحرف المشبهة بالأفعال .
- الضمائر .
- المضاف إليه .
- المفرد والمثنى والجمع .
- إعراب الجمل .
- التّواصل الكتابي .

English

Focus Skill

Grammar

1. Comparing and Contrasting /
2. Short Story Traits
3. Plot: Conflict & Resolution
4. Making Predictions/Point of View of Narration
5. Comparing Themes/ Recurring Themes Across Genres

6. Presenting an Argument
7. Finding the Main Idea/ Theme / Identifying Cause and Effect/ Biography and point of View of Narration
8. Compare and Contrast / Forms of Prose: Personal Essay
9. Figures of Speech

10. Figures of Speech:
11. Simile, Metaphor, personification

1. The Sentence
2. Parts of Speech
3. The Verb
4. Complements

5. Phrases
6. Subject Verb Agreement

7. Pronoun Antecedent Agreement

8. Verbs

9. Mechanics: Commas, semicolons, colons, hyphens, quotation marks, italics, dashes, capitalization, plurals, numbers, and using the right word

Sciences

Biology

Lesson Title

The Skeletal and Muscular Systems
 The Circulatory and Respiratory Systems
 The Digestive and Excretory systems
 Nutrition and Fitness
 Mitosis
 Meiosis

Sexual and Asexual Reproduction
 Heredity
 Punnett Squares and Pedigrees
 DNA Structure and Function
 Biotechnology

Chemistry

Lesson Title

Introduction to Matter
 Properties of Matter
 Physical and Chemical Changes
 Pure Substance and Mixture
 States of Matter

The Atom
 The Periodic Table
 Electrons and Chemical Bonding
 Ionic, Covalent, and Metallic Bonding

Physics

Lesson Title

Speed and Motion
 Acceleration
 Forces
 Gravity and Motion

Fluids and Pressure
 Electric Charge and Static Electricity
 Electric Current
 Electric Circuits