

Zahrat Al-Sahra'a International School

Grade 8 to 9 Entrance Exam

Required Lessons

Academic Year 2019-2020

Math

Algebra

Ch6: Systems of Equations and Inequalities:

L6.1: Solving systems by graphing

L6.2: Solving Systems by Substitutions

L 6.3: Solving Systems by Elimination

L6.4: Applications on Linear systems

L6.5: Linear inequalities

L6.6: Systems of inequalities

Ch7 and Ch8: Exponents and Polynomials

L7.1: Zero and Negative Exponents

L7.2: Scientific Notation

L7.3: Multiplication Properties of Exponents

L7.4: More Multiplication Properties

L7.5: Division Properties of Exponents

L8.1: Add and Subtract Polynomials

L8.2: Multiplying and Factoring Polynomials

L8.4: Multiplying Special cases

L8.5: Factoring Trinomials:

L8.6: Factoring trinomials

L8.7: Factoring Special cases

L8.8: Factoring by grouping

Ch9 & Ch10: Quadratic Functions and Equations and Radical Expressions and Equations:

L9.1: Quadratic Graphs

L9.2: Quadratic Functions

L9.3: Solving Quadratic Equations (By Square root)

L9.4: Solving Quadratic Equations (By Factoring)

L9.6: Quadratic Formula and Discriminant

L10.1: Pythagorean theorem

L10.2: Simplifying Radicals

L10.3: Operations with Radicals

L10.4: Solving Radical Equations

L10.6: Trigonometric Ratios

Ch11: Rational Expressions and Equations

L11.1: Simplifying Rational Expressions

L11.2: Multiplying and Dividing Rational Expressions

L11.3: Dividing Polynomials

L11.4: Add & Subtract Rational Expressions

L11.5: Solving Rational Expressions

Geometry

Ch3

L3.1: Lines and angles

L3.2: Parallel lines and Angles

L3.3: Proving Lines parallel

L3.4: Parallel and perpendicular lines

Ch4: Congruent Triangles

L4.1: Congruent Figures

L4.2: Triangles Congruence SSS and SAS

L4.3: Triangle congruence ASA and AAS

L4.5: Isosceles and Equilateral Triangles

L4.6: Congruence in right triangles

Arabic

- قراءة النَّصِّ .
- الإجابة على الأسئلة حول النَّصِّ + مرادفات وأضداد من خلال النَّصِّ .
- الفعل المضارع المرفوع .
- الفعل المضارع المنصوب .
- الفاعل
- المفعول به .
- . فعل الأمر .
- الأسماء الخمسة .
- المفرد والمثنى والجمع .
- إعراب الجمل .
- التّواصل الكتابي .

English

Literary Focus Skill

1. Comparing Characters
2. Analyze Characters and Theme
3. Analyze Irony / Paraphrase a Text
4. Biographical Approach
5. Analyze Structure and Organization in Nonfiction Texts
6. Summarizing a Plot
7. Making Inferences
8. Re-reading to Clarify
9. Comparing and Contrasting
10. Lyric Poem/Imagery/ Free Verse/ Rhyme
11. Punctuation Clues
12. Response Chart
13. Logic -and –Coherence Chart
14. Figures of speech: Hyperbole, Pun, Metaphor, Paradox, Oxymoron,
15. synecdoche, amplification, & irony , symbolism, onomatopoeia, alliteration, consonance, assonance, simile, Anaphora, & imagery

Grammar/ Mechanics

1. Subject And Object Complements & Sentence Structure
2. Prepositional Phrase/ Adjective Phrase/ Adverb Phrase
3. Participial Phrase/ Gerund Phrase
4. Infinitive Phrase/ Appositive Phrase
5. Adjective Clauses/ Relative Pronoun/ Relative Adverbs
6. Adverb Clauses/ Noun Clauses
7. Agreement: Subject- and- Verb Agreement
8. Pronoun-and- Antecedent Agreement
9. Principal Parts/ Regular and Irregular Verbs/ Tense/ Voice
10. Using Modifiers Correctly
11. Glossary of Usage
12. Mechanics: Commas, Semicolons, Colons, hyphens, Quotation Marks, italics, dashes, capitalizations, plurals, numbers, using the right word

Sciences

Biology

Lesson Title

Introduction to living things Classification of living things Archaea, bacteria and viruses Protists and fungi Plant processes Introduction to animals Animal Behavior The Nervous and Endocrine System	The Reproductive System The Immune System Population Dynamics Interactions In Communities Earth's support of life Non-renewable energy resources Renewable energy resources Managing resources
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Chemistry

Lesson Title

Introduction to Energy Temperature Thermal Energy and Heat Effects of Energy Transfer Chemical reactions	Organic chemistry Nuclear Reactions Solutions Acid, bases and salt Measuring pH
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Physics

Lesson Title

Work , energy and power Kinetic and potential energy Machines	Electromagnetism Electronic technology Magnets and Magnetism
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