



Midterm Contents: Semester 2, 2019

Ongkharak Demonstration School

Mathayom 4/5

Monday 2nd and Wednesday 4th and Friday 6th December, 2019

1. กลุ่มสาระการเรียนรู้ภาษาไทย ★ ภาษาไทยพื้นฐาน หลักและการใช้ภาษาไทย - การอ่านอย่างมีวิจารณญาณ วรรณคดี - อิเหนา	2. กลุ่มสาระการเรียนรู้คณิตศาสตร์ (ต่อ) ★ Additional Mathematics Description The examination will contain short answer questions in which students must show working for each question. The question types will include: 'Skills-based Problems' and 'Word/Application Problems'. There will be a range of difficulty in the questions, from easy to difficult. Learning Mathematics is a cumulative process. Knowledge and mastery of previous content is important. Therefore approximately 20-30% of the content for this Midterm Examination will be from material learned during first term, and 70-80% of the exam content will come from material learned during this term
2. กลุ่มสาระการเรียนรู้คณิตศาสตร์ ★ Mathematics Multiple Choice Fundamental Counting Principle Tree diagram Addition principle Multiplication principle Problem Solving Factorial notation solving by hand Permutation using formula Without repetition With repetition Combination using formula ★ Additional Mathematics Content Unit 1 – Exponents and Exponential Equations Properties of Exponents, Exponential Equations and Inequalities, Word Problems Involving Exponents and Exponential Equations Unit 2 – Logarithms and Logarithmic Equations Properties of Logarithms, Logarithmic Equations and Inequalities, Word Problems involving Logarithms and Logarithmic Equations	3. กลุ่มสาระการเรียนรู้วิทยาศาสตร์ ★ Science 1. Topic Changes of energy, matter, size, temperature of universe according to the big bang theory Link/Sources Notebook and Link below: https://drive.google.com/file/d/1Rusjt1D_w-b-fCx38wdjEBFObrz4HbFq/view?usp=sharing 2. Topic Component of milky way galaxy The birth of the star Relationship of light and magnitude of star Link/Sources Notebook and Link below: https://drive.google.com/file/d/1wZNRaNCMRlyxWeQjPBLtV_VWKOOCzWTd/view?usp=sharing 3. Topic Relationship of color, temperature and spectrum of the star Notebook and Link below: https://drive.google.com/file/d/1sKGYR1F4OoDFStrK_3LOGAwCRjwNPYV-/view?usp=sharing 4. Topic Evolution related to basic mass 5. Topic Changes to property of star

3. กลุ่มสาระการเรียนรู้วิทยาศาสตร์ (ต่อ) ★ Biology 1. Topic Unit 1: Chromosomes and genetic materials Link/Sources Notebook and Link below: https://drive.google.com/file/d/1neSHHsq15sUSIsyDBEqq_pDcGaoB50d45/view?usp=sharing 2. Topic Unit 1: Properties of genetic materials 3. Topic Unit 1: Mutation Link/Sources Notebook and Link below: https://drive.google.com/file/d/1ig_JLzijiHAGzonxR_tOiKBk_E0-3nM1hB/view?usp=sharing 4. Topic Unit 2: Basic vocabularies of genetic Probabilities in genetics 5. Topic Unit 2: Mendel's genetic inheritance Testcross Notebook and Link below: https://drive.google.com/file/d/1KDWe4r0Fc8kKCqmic08B_CWAcY3jf7m-e/view?usp=sharing 6. Topic Unit 2: Extension of Mendelian genetics	5. กลุ่มสาระการเรียนรู้ภาษาต่างประเทศ ★ English Future Forms and Functions (Unit 4) You'll need to - recognize various future forms in a text. - match different future forms with different functions/meanings - choose the appropriate future form to respond to a prompt - write a short piece using at least two different future forms in response to a prompt Vocabulary (Unit 5) You'll need to - recognize the grammatical form and meaning of words from the p40/41 reading - choose the appropriate vocabulary word to complete sentences in a text - write sentences using the vocabulary correctly 6. กลุ่มสาระการเรียนรู้การงานอาชีพฯ สอนนอกตาราง ★ งานเกษตร (ม.4/1,ม.4/2,ม.4/5) - ระดับของเทคโนโลยีการเกษตร - ที่มาของเทคโนโลยีการเกษตร
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