Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_

**Earth Science**

**Semester 1 Final Exam Study Guide**

* The final exam will be all multiple-choice/matching.
* The exam is worth 15% of your final semester grade.
* Do not bring electronic devices to the exam. This includes cell phones and iPods/iPads. If seen, they will be taken.
* If you finish your review packet (meet ***ALL*** due dates) AND are focused during the review days, then you may use a 3x5” HANDWRITTEN note card (both sides) on the final. The card will be turned in with your final.
* There will be no rest room passes until you are done with the test.
* BRING a PENCIL.
* BRING a book or something to do (NOT ELECTRONIC) to use when you are done with your final.

Keys to success:

* + Complete this study guide.
	+ Don’t wait until just a day or two before finals to get help.
	+ Start studying early. Remember, you have all winter break to relax.
	+ Use your chapter outlines in addition to this study guide for help and extra practice. Be sure to focus on what this study guide covers, but your chapter note outlines help a lot.
	+ Make flash cards for definitions and key concepts.
	+ Other resources include: Quizlet, textbook, textbook website for practice quizzes, my webpage with videos, etc.

Final exam main **topics**:

* + Chapter 2: Latitude, Longitude, and Contour Mapping
	+ Chapter 11: Layers of the Atmosphere, Methods of Heating & Cloud Formation
	+ Chapter 12: Air Masses, Fronts, Pressure Systems
	+ Chapter 13: Thunderstorms, Severe Storms, Hurricanes
	+ Global Winds Mini-Unit
	+ Chapter 15: Oceanography
	+ Chapter 14: Climate

**Final Exam Schedule**: Find your class period and time. Be on time.

* Do NOT be late. School policy is that tardy students will not be admitted to the classroom to take the final. Instead, tardy students must return Friday during 8th period to take the exam.
* Only need to be here for periods that have a final. (Buses run on their regular schedule.)
* If here during resource/lunch, will be in the cafeteria (open study hall), library (quiet), or gym.

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| --- | --- | --- | --- | --- |
| **Wednesday, January 11th**  |  | **Thursday, January 12th**  |  | **Friday, January 13th**  |
| 8:10-9:40 | Resource | 8:10-9:40 | Resource | 8:10-8:45 | Resource |
| 9:50-11:20 | 5th Period | 9:50-11:20 | 1st Period | 8:50-10:20 | 3rd Period |
| 12:20-1:50 | 6th Period | 12:20-1:50 | 2nd Period | 10:30-12:00 | 4th Period |
| 2:00-3:30 | 7th Period | 2:00-3:30 | Resource | 12:30-3:30 | 8th Period (Make-ups) |

**1st Semester Vocabulary**

For Semester Exam

**Vocabulary on the Final Exam**: Use Quizlet, vocabulary sheets, make flashcards, be able to define and describe the relationships between the words, apply the words, etc.

**Chapter 2 Mapping**

Latitude, longitude, Prime Meridian, Equator, International Date Line, latitude of North Pole/South Pole, time zone, topographic map, contour line, index contour, contour interval, depression contour, hachure, gradient

**Chapter 11 Atmosphere & Cloud Formation**

Temperature vs. volume, temperature vs. density, temperature vs particle speed, radiation, convection, conduction, heat (heat transfer), troposphere, stratosphere, mesosphere, thermosphere, tropopause, stratopause, mesopause, ozone, direct light, indirect light, Orographic lift, frontal lifting, dew point, condensation, evaporation, condensation nuclei, cirrus, stratus, cumulus, cumulonimbus, altostratus, altocumulus, humidity, relative humidity, saturation

**Chapter 12 Meteorology (Air Masses, Fronts & Pressure Systems)**

Continental tropical (cT), continental polar (cP), maritime tropical (mT), maritime polar (mP), air mass modification, cold front, warm front, occluded front, stationary front, high pressure system, low pressure system, wind – speed & direction based on isobars, station model

**Chapter 13 Severe Storms & Hurricanes**

Frontal thunderstorm, Air mass thunderstorm, updraft, downdraft, cumulonimbus, lightning, thunder, hail, Cumulus stage, Mature stage, Dissipation stage, hail, tornado, Fujita Scale, hurricane, eye, eye wall, storm surge, Tropical disturbance, Tropical depression, Tropical storm, hurricane, Saffir-Simpson Scale, cold wave, heat wave, drought

**Global Winds Mini-Unit**

Coriolis Effect, Trade Winds, Prevailing Westerlies, Polar Easterlies, jet streams

**Chapter 15 Oceanography**

Salinity, tide, spring tide, neap tide, wave, crest, trough, wave length, wave height, sonar, surface current, density current, surface layer, thermocline, bottom layer, gyre, sea, ocean, sea level, breaker

**Chapter 14 Climate**

Climate, Weather, Radiation, Positive Feedback Loops, Volcanism, Aerosols, Temperature, Precipitation, Vegetation, Tropical Moist Climate, Dry Climate, Moist-mid Latitude Climate (mild winter) , Moist-mid Latitude Climate (cold winter), Polar Climate, Biosphere, Atmosphere, Lithosphere, Hydrosphere, Global Warming, Greenhouse Effect, Greenhouse Gas, Carbon Dioxide, Methane, Fossil Fuels