8th Grade Second Quarter

Family Curriculum Guide

What will my child be learning during the second quarter of school?

ENGLISH LANGUAGE & READING AND KLEIN PREP (ELAR)

- Synthesizing information from a variety of genres, with a focus on informational text structure, characteristics and author's purpose
- Analyzing informational texts through discourse and writing
- Researching and drafting an informational essay with a strong thesis and supporting ideas
- Revising and editing for organization and style, with a focus on active and passive voice, subject-verb agreement, and pronoun-antecedent agreement

G/T HUMANITIES

- Generate ideas, gather information, and manage evidence relevant to the topic and purpose.
- Identify and explain an author's argument.
- Formulate research topic and questions to explore ideas.
- Locate, evaluate, and select information from a variety of sources.

Questions to Ask Your Child

ELAR & ELAR (KLEIN PREP)

- What are the characteristics of informational text?
- What are you writing about?
- Did you research any topics to find support for your writing?
- What is a thesis?
- What is the difference between active and passive voice?How do you use them?
- Why is subject-verb agreement important? Can you give me an example?

Questions to Ask Your Child

G/T HUMANITIES

- What ideas have you covered in class? Why do they matter?
- Ask:
  - Why might ___ matter to me?
  - Why might ___ matter to people around me?
  - Why might ___matter to the world?

How Can I Help My Child Learn at Home?

ELAR & ELAR (KLEIN PREP)

- Set aside time each evening for independent reading
- Talk you your student about the texts they read
- Check Schoology for updates and assignments
- Encourage reading outside of fiction (magazines, news articles, etc.)
- Practice reading, writing and grammar skills on iXL

How Can I Help My Child Learn at Home?

G/T HUMANITIES

- Assist students with conducting research.
- Allow student time to read independently.
- Encourage students to challenge themselves with complex texts.
- Have students reflect on their thinking.

KLEIN INDEPENDENT SCHOOL DISTRICT
7200 Spring Cypress Rd., Spring, TX 77379

Tools for Success: Access the student dashboard by going to **Kleinisd.net/students-families** and select **Student Dashboard** at the bottom of the page.

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MATH

- Determine rate of change/slope and y-intercept from a table or graph
- Graph proportional relationships
- Write equation in the form y = mx+b given words, table, or graph
- Use a trendline to make a prediction given data in a scatterplot

KP ALGEBRA 1

- Write, graph, and analyze a linear model for a
- real-world situation
- Identify arithmetic sequences in function form
- Write a formula for the nth term of arithmetic sequences
- Write the equation of a line in slope-intercept form and standard form
- Make predictions using a linear regression.
- Write linear inequalities in two variables, to represent real world situations
- Read, interpret, and graph the solutions of a linear inequality in two variables

KP GEOMETRY

- Identify and perform rigid transformations and composite transformations on and off the coordinate plane
- Use rigid transformations to determine if figures are congruent
- Determine when congruence criteria show triangles are congruent and use to write proofs
- Apply theorems about angle measures in triangles, determine and use points of concurrency for special segments in triangles

Questions to Ask Your Child

MATH

- How do you find the rate of change or slope from a table?
- What is a proportional relationship?
- How do you write the equation of a line from a graph?

KP ALGEBRA 1

- How do you find the rate of change or slope from a table?
- How do you write the equation of a line from a graph?
- How are linear inequalities different from linear equations?

Questions to Ask Your Child

KP GEOMETRY

- What is a rigid transformation?
- What is a composite transformation?
- What are some ways you can tell if two triangles are congruent (the same)?

How Can I Help My Child Learn at Home?

MATH, KP ALGEBRA 1, AND KP GEOMETRY

- Ask your students what they are learning.
- Access the Klein Digital resources support math skills through your students dashboard.
- **IXL** - Skill-based program that allows students to practice skills they may have not mastered.
- **Fact track** - Practice facts online and track growth

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What will my child be learning during the second quarter of school?

SCIENCE

- Demonstrating and predicting the sequence of events in the lunar cycle.
- Relating the positions of the Moon and Sun to their effect on ocean tides.
- Relating plate tectonics to the formation of crustal features
- Describing the historical development of evidence that supports plate tectonic theory
- Interpreting topographic maps and satellite views to identify land and erosional features
- Demonstrating and calculating how unbalanced forces change the speed or direction of an object's motion
- Differentiating between speed, velocity, and acceleration.

BIOLOGY

- Identifying components of DNA and how information for specifying the traits of an organism is carried in the DNA
- Recognizing that components that make up the genetic code are common to all organisms.
- Describing the stages of the cell cycle and the importance of the cell cycle to the growth of organisms.
- Describing the roles of DNA, RNA, and environmental factors in cell differentiation.
- Recognizing that disruptions of the cell cycle lead to diseases
- Explaining the purpose and process of transcription and translation
- Recognizing that gene expression is a regulated process.
- Recognizing the significance of meiosis to sexual reproduction.
- Identifying and illustrating changes in DNA and evaluating the significance of these changes.

Questions to Ask Your Child

SCIENCE

- Why can't we see a new moon?
- What causes spring tides and neap tides?
- What type of plate tectonic movement forms land features?
- How does seafloor spreading help support the tectonic theory?
- What is a topographic map and how do you read it?
- How do you know if an object is being acted on by balanced or unbalanced forces?
- How do you calculate speed, velocity or acceleration?

Questions to Ask Your Child

BIOLOGY

- What are the components (structures) of DNA?
- If all living organisms have DNA with the same components, why do we have different traits?
- What are the stages of the cell cycle and which is the most significant stage?
- Give an example of how an environmental factor affects cell differentiation
- Where can disruption in the cell cycle occur and what is the effect?
- What is the purpose of transcription and translation?
- What does gene expression mean?
- Why is meiosis important?
- Describe at least 3 different types of mutations and how they can affect a cell

How Can I Help My Child Learn at Home?

SCIENCE

- Work together with your child to come up with a physical action, such as hand signs, for each type of boundary to remember what type of landform is created using this guide as a reference
- Try working on these two practice force problems with your child

How Can I Help My Child Learn at Home?

BIOLOGY

- Print and cut out this puzzle and work with your child to make the correct connections about the structure of DNA
- Work though this interactive study experience with your child to reinforce their learning about the cell cycle and mitosis

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SOCIAL STUDIES (US HISTORY)

- Explain the issues surrounding important events of the American Revolution.
- Strengths and weaknesses of the Articles of Confederation that leads to the creation of the Constitution.
- The Bill of Rights and how they protect citizens from government abuse.
- The contributions of the Founding Fathers.

Questions to Ask Your Child

SOCIAL STUDIES (US HISTORY)

- How did the American Revolution end?
- What made the Constitution stronger than the Articles of Confederation?
- Who were the first five presidents and why are they important?

How Can I Help My Child Learn at Home?

SOCIAL STUDIES (US HISTORY)

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