



Dear 6<sup>th</sup> – 8<sup>th</sup> Grade Parents and Guardians:

While your students are home, we ask that you continue to partner with us in ensuring ongoing learning. Below is a list of activities we recommend your students complete on a daily basis.



**Reading (20 minutes)** - if you have access to online resources, your student can log into [Clever](#) to access district resources such as Pearson Realize, Compass Learning, and [Scholastic](#). Please encourage your student to choose stories or articles to read. If you have reading materials at home, feel free to use those as well. After students are done reading, have your students tell you what their article or story was about. Students may also complete hard copy Reading activities as well. Reading packet options are available [here](#).



**Writing (30 minutes)**- if you have access to online resources, please visit [Scholastic Story Starters](#) (6<sup>th</sup> grade only), [Story Jumpers](#), or [Story Board That](#) for fun and creative story starters and writing prompts. Have students use these prompts and tools to create their very own story. Students can also write... a story, their feelings, their thoughts about what they are reading, a letter, an information piece about something on which they are an expert. Writing packet options are available [here](#).



**Math (30 minutes)** - if you have access to online resources, your student can log into [Clever](#) to access Mathia. A Math [scavenger hunt](#) is provided to encourage your student to find the math that is all around them. Visit [IXL](#), [Khan Academy](#), and [Cool Math](#) for practice and fun Math games. Math packet options are available [here](#).



**Social Studies (20 minutes)** - if you have online access, your student can log into [Clever](#) to access district resources. You will also find articles in both English and Spanish at [Tweentribune](#). Have students to read and complete the quiz. Also visit [Education.com](#), [Newsela](#), and [IXL](#) for interactive Social Studies activities. Social Studies packet options are available [here](#).



**Science (20 minutes)** - if you have access to online access, your student can log into [Clever](#) to access district resources. Visit [Energy Kids](#) to learn more about energy as well as games and activities. Visit this [Optics 4 Kids](#) to learn about cool optical illusions and visit [Ask a Biologist](#) for virtual field trips and activities. Visit [YouTube videos](#) and [National Geographic Kids](#) to learn more about science. Science packet options are available [here](#).



**Exercise (60 minutes a day)** - regular exercise and movement is important to do every day. Movement helps you reduce stress, build strong bones and muscles, and helps you to be ready to learn! Try to get 60 minutes of physical activity every day. Visit [GoNoodle](#) for movement videos.



Estimados padres y tutores de 6º a 8º grado:

Mientras sus estudiantes estén en casa, le pedimos que continúe colaborando con nosotros para garantizar un aprendizaje continuo. A continuación, hay una lista de actividades que recomendamos que sus estudiantes completen diariamente.



**Lectura (20 minutos)** - Si tiene acceso a recursos en línea, su estudiante puede iniciar sesión en [Clever](#) para acceder a recursos del distrito como Pearson Realize, Compass Learning y [Scholastic](#). Por favor anime a su estudiante a elegir historias o artículos para leer. Si tiene materiales de lectura en casa, siéntase libre de usarlos también. Una vez que los alumnos hayan terminado de leer, pídeles que le cuenten de qué se trata su artículo o historia. Los estudiantes también pueden completar actividades de lectura impresas. Las opciones de paquetes de lectura están disponibles [aquí](#).



**Escritura (30 minutos)**- Si tiene acceso a recursos en línea, visite [Scholastic Story Starters](#) ( solo 6<sup>th</sup> grado), [Story Jumpers](#), o [Story Board That](#) para iniciadores de historias divertidas y creativas y mensajes de escritura. Haga que los estudiantes usen estas indicaciones y herramientas para crear su propia historia. Los estudiantes también pueden escribir ... una historia, sus sentimientos, sus pensamientos sobre lo que están leyendo, una carta, una información sobre algo en lo que son expertos. Las opciones de paquetes de escritura están disponibles [aquí](#).



**Matemáticas (30 minutos)** - Si tiene acceso a recursos en línea, su estudiante puede iniciar sesión en [Clever](#) para usar Mathia. Una búsqueda de matemáticas se puede encontrar en [scavenger hunt](#) para animar a su estudiante a encontrar las matemáticas que en todo su alrededor. Visite [IXL](#), [Khan Academy](#), y para practicar y divertir con juegos matemáticos. Las opciones de paquetes matemáticos están disponibles [aquí](#).



**Estudios sociales (20 minutos)** - Si tienen acceso en línea, su estudiante puede iniciar sesión en [Clever](#) para acceder los recursos. Encontraran articulos en ingles y espanol en [Tweentribune](#). Los estudiantes pueden leer y contestar las preguntas aqui. Tambien visite [Education.com](#), [Newsela](#), y [IXL](#) para actividades interactivas. Las opciones de paquetes de estudios sociales están disponibles [aquí](#).










**Ciencias (20 minutos)** - Si tiene acceso a recursos en línea, su estudiante puede iniciar sesión en [Clever](#) para acceder los recursos. Visite [Energy Kids](#) para aprender más sobre energía, juegos y actividades. Visite [Optics for Kids](#) para aprender sobre ilusiones ópticas geniales y otras actividades. Visite [Ask a Biologist](#) para excursiones virtuales y actividades. Visite [YouTube videos](#) y [National Geographic Kids](#) para aprender más de ciencias. Las opciones de paquetes de ciencias están disponibles [aquí](#).










**Ejercicio (60 minutos diarios)** - es importante hacer ejercicio y movimiento regularmente todos los días. ¡El movimiento te ayuda a reducir el estrés, desarrollar huesos y músculos fuertes, y te ayuda a estar listo para aprender! Intente realizar 60 minutos de actividad física todos los días. Visite [GoNoodle](#) para videos de movimiento.










Access these programs from Clever at <a href="https://www.clever.com/in/maywood89">https://www.clever.com/in/maywood89</a>	
	Lexia Core 5 has literacy activities with tracked progress and customized lessons. K-5; App available
	Raz-Kids has online leveled books from basic to advanced. Students can record themselves and take quizzes. K-5; English and Spanish; App available
	Imagine Español has Spanish literacy activities with tracked progress and customized lessons. K-3; Spanish
	Imagine Math has math activities with tracked progress and customized lessons. K-5
	Wonders/Maravillas includes literature, vocabulary, writing, and grammar activities K-5; English and Spanish; App available (separate sign-in required—email teacher if needed)
	World Book A world of learning at your fingertips. Explore important people, animals, maps, science, and activities. K-8; English and Spanish
	Edgenuity Pathblazer includes Math and Reading activities linked to standards. K-8; Limited School Access

If you need login assistance with login information, contact your teacher through [email](#).






## Additional Resource Links






<b>Reading</b>	
	<a href="https://classroommagazines.scholastic.com/support/learnathome.html">https://classroommagazines.scholastic.com/support/learnathome.html</a> Choose books, videos, and activities by grade levels
	<a href="https://www.thespanishexperiment.com/stories">https://www.thespanishexperiment.com/stories</a> Children's stories in Spanish
	<a href="https://www.storylineonline.net/">https://www.storylineonline.net/</a> Actors and Actresses read books with illustrations
	<a href="https://www.getepic.com/">https://www.getepic.com/</a> 1000's of award winning books. English and Spanish Signup required, free 30 days
	<a href="https://newsela.com/">https://newsela.com/</a> English; <a href="https://newsela.com/rules/spanish">https://newsela.com/rules/spanish</a> Spanish News articles written for students with quizzes and writing prompts for 3-8; English and Spanish
	<a href="https://www.tweentribune.com/">https://www.tweentribune.com/</a> Informational text at different grade levels
	<a href="https://stories.audible.com/start-listen">https://stories.audible.com/start-listen</a> Free audiobooks for PreK-High school students



<b>Online Magazines</b>	
	Time for Kids <a href="http://www.timeforkids.com">http://www.timeforkids.com</a>
	Scholastic News <a href="http://magazines.scholastic.com">http://magazines.scholastic.com</a> English <a href="https://classroommagazines.scholastic.com/spanish.html">https://classroommagazines.scholastic.com/spanish.html</a> Spanish
	Highlights Kids <a href="https://www.highlightskids.com/">https://www.highlightskids.com/</a>
	Sport Illustrated Kids <a href="http://www.sikids.com">http://www.sikids.com</a>
	National Geographic Kids <a href="http://kids.nationalgeographic.com">http://kids.nationalgeographic.com</a>



Writing	
	<a href="http://www.scholastic.com/teachers/story-starters/index.html">http://www.scholastic.com/teachers/story-starters/index.html</a> Story Starter ideas by grade level
	<a href="https://www.storyboardthat.com/">https://www.storyboardthat.com/</a> Digital story telling with backgrounds, characters, and text


Dual Language	
	<a href="https://l2trec.utah.edu/news/utahdliathome/spanish.php">https://l2trec.utah.edu/news/utahdliathome/spanish.php</a> Spanish and Dual language activities and resources

Math	
	<a href="https://www.coolmath4kids.com/">https://www.coolmath4kids.com/</a> K-5 Math games, lessons, brainteasers
	<a href="https://minds-in-bloom.com/math-scavenger-hun/">https://minds-in-bloom.com/math-scavenger-hun/</a> K-5 Math scavenger hunt ideas
	<a href="https://www.khanacademy.org/math">https://www.khanacademy.org/math</a> K-8 Practice early math through grade 8
	<a href="https://www.ixl.com/">https://www.ixl.com/</a> K-8 Practice early math through grade 8
	<a href="https://www.mathgames.com/math-games.html">https://www.mathgames.com/math-games.html</a> K-8 math games by grade and topic

Science and Social Studies	
	BrainPop Jr <a href="https://jr.brainpop.com">https://jr.brainpop.com</a> BrainPOP Español <a href="https://esp.brainpop.com">https://esp.brainpop.com</a> BrainPop <a href="https://www.brainpop.com/">https://www.brainpop.com/</a> BrainPopELL <a href="https://ell.brainpop.com">https://ell.brainpop.com</a> Animated educational videos and activities on many school topics K-8; App available (Username: district89; Password: brainpop2)
	<a href="https://www.eia.gov/kids/">https://www.eia.gov/kids/</a> Information and games about energy
	<a href="https://www.optics4kids.org/illusions">https://www.optics4kids.org/illusions</a> Optical illusions
	<a href="https://blockly.games/">https://blockly.games/</a> Programming games for kids
	<a href="https://www.education.com/activity/social-studies/">https://www.education.com/activity/social-studies/</a> Social Studies activities by grade level

Health	
	<a href="https://www.gonoodle.com/">https://www.gonoodle.com/</a> Movement and mindfulness videos
	<a href="https://aha-nflplay60.discoveryeducation.com/families">https://aha-nflplay60.discoveryeducation.com/families</a> Fun activities, videos, and virtual field trips

Art/Music	
	<a href="http://www.maywoodfinearts.org/?page_id=3043">http://www.maywoodfinearts.org/?page_id=3043</a> Take an online class with Maywood Fine Arts
	<a href="https://colormandala.com/">https://colormandala.com/</a> Color mandelas online

For Parents	
	<a href="http://www.parenttoolkit.com/">http://www.parenttoolkit.com/</a> English; <a href="http://www.parenttoolkit.com/home?lang=es">http://www.parenttoolkit.com/home?lang=es</a> Spanish Age level guides for academic, health, social emotional topics and video parenting guides English and Spanish

## Virtual Field Trips/Tours

Use Google Earth to explore our National Parks.

[Badlands National Park](#)  
[Death Valley National Park](#)  
[Denali National Park](#)  
[Everglades National Park](#)  
[Glacier National Park](#)  
[Grand Canyon National Park](#)  
[Great Smoky Mountain National Park](#)  
[Redwood National and State Parks](#)  
[Rocky Mountain National Park](#)  
[Yellowstone National Park](#)



Lesson ideas:

Choose a National Park. Record your observations, then choose to create one of the following:

- Design a travel brochure
- Write a newspaper article to describe the location and encourage travel there
- Create a map that shows the location of the national park

Zoos and Web Cams - Observe various zoo animals through web cams.

[Smithsonian's National Zoo](#)  
[San Diego Zoo](#)  
[Animal Planet Live](#)  
[National Aquarium](#): Black Tip Reef Sharks, Jellies, and Pacific Coral Reef Live  
[Seattle Aquarium](#): YouTube virtual field trip and lesson  
[Seattle Aquarium Live Cams](#)



Lesson ideas:

Visit and observe an animal of your choice. Complete one of the following:

- Observe the animal for one week. Record these observations and then write a journal about the animal and its habits.
- Create an informative poster about the animal.
- Describe the animal's habitat.

[Planetarium](#) - Explore over 60,000 stars, locate planets, and watch sunrises and solar eclipses. If you enter your location, and you can see all the constellations that are visible in the night sky in your corner of the world.

[NASA Commercial Crew Virtual Tours](#) - YouTube series containing virtual tours of training facilities. Learn how the astronauts train for space travel and life aboard the International Space Station.

[Smithsonian Latino Center](#) - Features live broadcasts of Latina writers and virtual exhibits around latino cultures. Includes a Latino Virtual Museum Bilingual Teacher Training Took Kit that is now available online and via iTunes U.

Tour various locations from around the world.

[The Great Wall of China](#)  
[Pompeii](#)  
[Ellis Island](#) - this site also includes some additional activities

Lesson ideas:

Write a journal entry from about a journey to this location.  
Create a travel brochure.

Take a trip to Walt Disney World and go on a virtual ride of some of Disney's famous attractions.

[Space Mountain](#)  
[Splash Mountain](#)  
[Test Track](#)  
[Expedition Everest](#)  
[Rock n Roller Coaster](#)  
[Soarin'](#)  
[Seven Dwarfs Mine Train](#)  
[Rise of the Resistance](#)  
[Mickey and Minnie's Runaway Railway](#)  
[Slinky Dog Dash](#)  
[Millenium Falcon/ Smuggler's Run](#)



## Student eLearning Activities Log Week 7 – May 4 – May 8

Student Name \_\_\_\_\_ Grade \_\_\_\_\_

Teacher \_\_\_\_\_

Please write the activities you completed each day.

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
Example:	Mathia Reading packet Math packet PE Science experiment Raz-Kids Compass Learning	Reading packet Math packet Raz-Kids Art Imagine Math	Imagine Math Writing Virtual Tour Read a book Jumped Rope/Burpees	Imagine Math Reading packet Math packet Social Studies Music YouTube exercise video	Imagine Math Reading packet Math packet Art project Science experiment Raz-Kids Lexia
Activities/ Assignments					

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_

## Registro de actividades de aprendizaje electrónico semana 7 del 4 de mayo al 8 de mayo

Nombre \_\_\_\_\_ Grado \_\_\_\_\_

Maestro/a \_\_\_\_\_

Por favor escribe las actividades que completaste cada día.

	lunes	martes	miércoles	jueves	viernes
Ejemplo:	Mathia Paquete de lectura Paquete de matemáticas Educación física Ciencias Raz-Kids Compass Learning	Paquete de lectura Paquete de matemáticas Raz-Kids Arte Imagine Math Lexia	Imagine Math Escritura Paseo Virtual Leer un libro Brincar la cuerda/sentadillas Lexia	Imagine Math Paquete de lectura Paquete de matemáticas Estudios Social Video YouTube de ejercicio	Imagine Math Paquete de lectura Paquete de matemáticas Arte Experimento de Ciencia Raz-Kids Lexia
Actividades/ Tareas					

Firma de Padres \_\_\_\_\_ Fecha \_\_\_\_\_

TAKE NOTES

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# from **The Miracle Worker**

by William Gibson

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*The Miracle Worker* is a play based on the real-life story of teacher Annie Sullivan and her student Helen Keller, a seven-year-old girl who is unable to see, hear, or speak. Like her student, Annie suffers from eyesight disabilities; however, she is not totally blind.

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**from Act I**

**KELLER.** [*very courtly*] Welcome to Ivy Green, Miss Sullivan. I take it you are Miss Sullivan—

**KATE.** My husband, Miss Annie, Captain Keller.

**ANNIE.** [*her best behavior*] Captain, how do you do.

**KELLER.** A pleasure to see you, at last. I trust you had an agreeable journey?

**ANNIE.** Oh, I had several! When did this country get so big?

**JAMES.** Where would you like the trunk, father?

**KELLER.** Where Miss Sullivan can get at it, I imagine.

**ANNIE.** Yes, please. Where's Helen?

**KELLER.** In the hall, Jimmie—

**KATE.** We've put you in the upstairs corner room, Miss Annie, if there's any breeze at all this summer, you'll feel it—

*[In the house the setter BELLE flees into the family room, pursued by HELEN with groping hands; the dog doubles back out the same door, and HELEN still groping for her makes her way out to the porch; she is messy, her hair tumbled, her pinafore now ripped, her shoelaces untied. KELLER acquires the suitcase, and ANNIE gets her hands on it too, though still endeavoring to live up to the general air of propertied manners.<sup>1</sup>]*

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1. the general air of propertied manners atmosphere of refinement and wealth

















Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Pre-Reading****Purpose for Reading****Objective:** Identifying potential themes for a book**Activity**

Read the book summary on the back of the book and the following quotations from Helen Keller and Annie Sullivan. In your small groups, discuss the meaning of these quotations, and identify potential themes you expect to learn about while reading *The Miracle Worker*.

- “Although the world is full of suffering, it is full also of the overcoming of it.”—Helen Keller
- “Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved.”—Helen Keller
- “People seldom see the halting and painful steps by which the most insignificant success is achieved.”—Annie Sullivan
- “Keep on beginning and failing. Each time you fail, start all over again, and you will grow stronger until you have accomplished a purpose.”—Annie Sullivan



Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Act 1****Perspective****Objective:** Understanding how events can affect the author's life**Activity**

Before directors of movies or plays actually begin production, they prepare a storyboard, which is a rough sketch of the action of each scene. It includes the background, props, and sketches of each character in a series of drawings to show the sequence of the scene.

By the end of Pg. 7, Kate and Captain Keller have discovered that the baby Helen is blind and deaf due to the fever she has had. In your group, draw a storyboard of a scene that might take place when Helen is two or three years old. Be sure to include details of what she may look like, what she may be doing, and how she interacts with her family members, including her father, mother, and other children in the family.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Act 1****Advertisement****Objective:** Learning to write an employment advertisement**Activity**

After Helen dumps Mildred out of the cradle, Captain Keller finally agrees to try to hire someone to help teach and take care of Helen. Since he runs a newspaper, he is quite familiar with writing advertisements. Pretend that you are Captain Keller and need to write an advertisement for the governess position. Be sure to include all the requirements you expect of the person you will hire, both from an employment and personal standpoint, as well as the benefits you offer.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Act 2****Newspaper Writing**

**Objective:** Identifying dramatic moments and relating them in a news article  
Writing letters to the editor of a newspaper  
Understanding the use of satire in editorial cartoons

**Activity 1**

As Annie sits at the breakfast table watching Helen wander around putting her fingers in everyone's food, she is shocked that Kate, Captain Keller, and James seem to be completely unaware and unconcerned about Helen's behavior. Write a front-page newspaper article detailing the meal and subsequent argument between Annie and the Kellers about disciplining Helen. Write the story in the factual, detached, unbiased style required of newspaper reporters.

- There must be an eye-catching headline.
- The first paragraph should include the basic facts—who, what, where, why, when, and how, so that a reader who has time to read only the first paragraph learns what happened.
- The subsequent paragraphs should add factual details and substance to the story for the readers who want more information.
- The last paragraph should indicate how this incident was resolved.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Act 2****Point of View****Objective:** Understanding a character's point of view**Activity 1**

At the time of this play, it was very common for people to keep a journal in which they wrote about their thoughts and feelings. After years of allowing Helen's unruly behavior, Kate learns that Annie has taught Helen how to sit at the table, use a fork and spoon, and fold her napkin. Assume the part of Kate, and write a journal entry describing your feelings when you heard this from Annie.

**Activity 2**

Continuing in Kate's role, remember the argument the Captain just had with Annie before he left the house. Write another paragraph in your journal entry describing what you expect the Captain to say when he returns.



Rewrite the factors listed as an expression with a power of two.

Answers

- 1)  $2 \times 2 \times 2 \times 2 \times 53$  1. \_\_\_\_\_
- 2)  $2 \times 2 \times 3 \times 3 \times 11$  2. \_\_\_\_\_
- 3)  $3 \times 3 \times 3 \times 19$  3. \_\_\_\_\_
- 4)  $2 \times 5 \times 5 \times 17$  4. \_\_\_\_\_
- 5)  $2 \times 3 \times 3 \times 31$  5. \_\_\_\_\_
- 6)  $2 \times 2 \times 2 \times 2 \times 53$  6. \_\_\_\_\_
- 7)  $2 \times 2 \times 2 \times 2 \times 53$  7. \_\_\_\_\_
- 8)  $2 \times 2 \times 11$  8. \_\_\_\_\_
- 9)  $2 \times 2$  9. \_\_\_\_\_
- 10)  $2 \times 2 \times 3 \times 61$  10. \_\_\_\_\_
- 11)  $2 \times 2 \times 2 \times 3 \times 31$  11. \_\_\_\_\_
- 12)  $2 \times 2 \times 5 \times 23$  12. \_\_\_\_\_
- 13)  $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 7$  13. \_\_\_\_\_
- 14)  $2 \times 2 \times 43$  14. \_\_\_\_\_
- 15)  $2 \times 2 \times 2 \times 3 \times 3$  15. \_\_\_\_\_
- 16)  $2 \times 2 \times 2 \times 2 \times 2 \times 7$  16. \_\_\_\_\_
- 17)  $2 \times 2 \times 2 \times 2 \times 5$  17. \_\_\_\_\_
- 18)  $3 \times 5 \times 5 \times 5$  18. \_\_\_\_\_
- 19)  $2 \times 3 \times 5 \times 5$  19. \_\_\_\_\_
- 20)  $2 \times 2$  20. \_\_\_\_\_



Rewrite the factors listed as an expression with a power of two.

- 1)  $2 \times 2 \times 2 \times 2 \times 53$
- 2)  $2 \times 2 \times 3 \times 3 \times 11$
- 3)  $3 \times 3 \times 3 \times 19$
- 4)  $2 \times 5 \times 5 \times 17$
- 5)  $2 \times 3 \times 3 \times 31$
- 6)  $2 \times 2 \times 2 \times 2 \times 53$
- 7)  $2 \times 2 \times 2 \times 2 \times 53$
- 8)  $2 \times 2 \times 11$
- 9)  $2 \times 2$
- 10)  $2 \times 2 \times 3 \times 61$
- 11)  $2 \times 2 \times 2 \times 3 \times 31$
- 12)  $2 \times 2 \times 5 \times 23$
- 13)  $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 7$
- 14)  $2 \times 2 \times 43$
- 15)  $2 \times 2 \times 2 \times 3 \times 3$
- 16)  $2 \times 2 \times 2 \times 2 \times 2 \times 7$
- 17)  $2 \times 2 \times 2 \times 2 \times 5$
- 18)  $3 \times 5 \times 5 \times 5$
- 19)  $2 \times 3 \times 5 \times 5$
- 20)  $2 \times 2$

**Answers**

1.  $\frac{4^2 \times 53}{}$
2.  $\frac{6^2 \times 11}{}$
3.  $\frac{3^2 \times 57}{}$
4.  $\frac{5^2 \times 34}{}$
5.  $\frac{3^2 \times 62}{}$
6.  $\frac{4^2 \times 53}{}$
7.  $\frac{4^2 \times 53}{}$
8.  $\frac{2^2 \times 11}{}$
9.  $\frac{2^2}{}$
10.  $\frac{2^2 \times 183}{}$
11.  $\frac{2^2 \times 186}{}$
12.  $\frac{2^2 \times 115}{}$
13.  $\frac{8^2 \times 14}{}$
14.  $\frac{2^2 \times 43}{}$
15.  $\frac{6^2 \times 2}{}$
16.  $\frac{4^2 \times 14}{}$
17.  $\frac{4^2 \times 5}{}$
18.  $\frac{5^2 \times 15}{}$
19.  $\frac{5^2 \times 6}{}$
20.  $\frac{2^2}{}$



Solve each problem.

- 1) Will  $\sqrt{90}$  be closer to 9 or closer to 10?
- 2) Will  $\sqrt{84}$  be closer to 9 or closer to 10?
- 3) Will  $\sqrt{45}$  be closer to 6 or closer to 7?
- 4) Will  $\sqrt{72}$  be closer to 8 or closer to 9?
- 5) Will  $\sqrt{80}$  be closer to 8 or closer to 9?
- 6) Will  $\sqrt{88}$  be closer to 9 or closer to 10?
- 7) Will  $\sqrt{39}$  be closer to 6 or closer to 7?
- 8) Will  $\sqrt{85}$  be closer to 9 or closer to 10?
- 9) Will  $\sqrt{41}$  be closer to 6 or closer to 7?
- 10) Will  $\sqrt{97}$  be closer to 9 or closer to 10?
- 11) Will  $\sqrt{99}$  be closer to 9 or closer to 10?
- 12) Will  $\sqrt{32}$  be closer to 5 or closer to 6?
- 13) Will  $\sqrt{26}$  be closer to 5 or closer to 6?
- 14) Will  $\sqrt{31}$  be closer to 5 or closer to 6?
- 15) Will  $\sqrt{51}$  be closer to 7 or closer to 8?
- 16) Will  $\sqrt{55}$  be closer to 7 or closer to 8?
- 17) Will  $\sqrt{42}$  be closer to 6 or closer to 7?
- 18) Will  $\sqrt{28}$  be closer to 5 or closer to 6?
- 19) Will  $\sqrt{91}$  be closer to 9 or closer to 10?
- 20) Will  $\sqrt{86}$  be closer to 9 or closer to 10?

**Answers**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
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18. \_\_\_\_\_
19. \_\_\_\_\_
20. \_\_\_\_\_



Solve each problem.

- 1) Will  $\sqrt{90}$  be closer to 9 or closer to 10?
- 2) Will  $\sqrt{84}$  be closer to 9 or closer to 10?
- 3) Will  $\sqrt{45}$  be closer to 6 or closer to 7?
- 4) Will  $\sqrt{72}$  be closer to 8 or closer to 9?
- 5) Will  $\sqrt{80}$  be closer to 8 or closer to 9?
- 6) Will  $\sqrt{88}$  be closer to 9 or closer to 10?
- 7) Will  $\sqrt{39}$  be closer to 6 or closer to 7?
- 8) Will  $\sqrt{85}$  be closer to 9 or closer to 10?
- 9) Will  $\sqrt{41}$  be closer to 6 or closer to 7?
- 10) Will  $\sqrt{97}$  be closer to 9 or closer to 10?
- 11) Will  $\sqrt{99}$  be closer to 9 or closer to 10?
- 12) Will  $\sqrt{32}$  be closer to 5 or closer to 6?
- 13) Will  $\sqrt{26}$  be closer to 5 or closer to 6?
- 14) Will  $\sqrt{31}$  be closer to 5 or closer to 6?
- 15) Will  $\sqrt{51}$  be closer to 7 or closer to 8?
- 16) Will  $\sqrt{55}$  be closer to 7 or closer to 8?
- 17) Will  $\sqrt{42}$  be closer to 6 or closer to 7?
- 18) Will  $\sqrt{28}$  be closer to 5 or closer to 6?
- 19) Will  $\sqrt{91}$  be closer to 9 or closer to 10?
- 20) Will  $\sqrt{86}$  be closer to 9 or closer to 10?

**Answers**

1. 9
2. 9
3. 7
4. 8
5. 9
6. 9
7. 6
8. 9
9. 6
10. 10
11. 10
12. 6
13. 5
14. 6
15. 7
16. 7
17. 6
18. 5
19. 10
20. 9



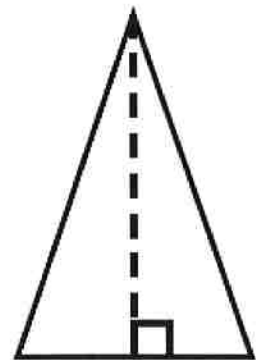
Solve each of the following. Please draw a picture and use the Pythagorean Theorem to solve. ***Be sure to label all answers and leave answers in exact simplified form.***

1. The bottom of a ladder must be placed 3 feet from a wall. The ladder is 12 feet long. How far above the ground does the ladder touch the wall?
2. A soccer field is a rectangle 90 meters wide and 120 meters long. The coach asks players to run from one corner to the corner diagonally across the field. How far do the players run?
3. How far from the base of the house do you need to place a 15' ladder so that it exactly reaches the top of a 12' wall?
4. What is the length of the diagonal of a 10 cm by 15 cm rectangle?
5. The diagonal of a rectangle is 25 in. The width is 15 in. What is the area of the rectangle?

6. Two sides of a right triangle are 8" and 12".
- A. Find the the area of the triangle if 8 and 12 are legs.
- B. Find the area of the triangle if 8 and 12 are a leg and hypotenuse.

7. The area of a square is  $81 \text{ cm}^2$ . Find the perimeter of the square.

8. An isosceles triangle has congruent sides of 20 cm. The base is 10 cm. What is the area of the triangle?

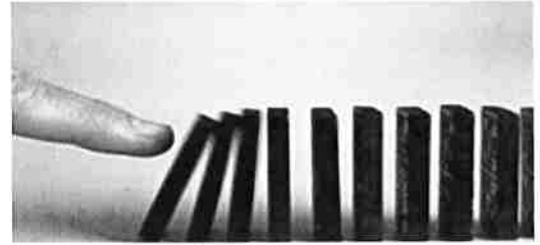


9. A baseball diamond is a square that is 90' on each side. If a player throws the ball from 2<sup>nd</sup> base to home, how far will the ball travel?
10. Jill's front door is 42" wide and 84" tall. She purchased a circular table that is 96 inches in diameter. Will the table fit through the front door?

# Introduction to Properties of Waves

## Reflect

Have you ever lined up a series of dominoes and watched as you pushed just the first one? What happens? The rest of the dominoes topple down as one domino after another passes the energy along. **Waves** work in the same way as an oscillation, or disturbance, traveling along with an energy transfer. Motion of waves moves energy from one place to another. Waves are distinct from other energy transport systems because they can transport energy without the need to transport matter. For example, when a bat transfers energy to a ball, the ball is transported to a new position some distance away. This wave phenomenon allows energy to be transported from one place to another without transferring particles the entire distance through which the wave travels.



Just like wave particles, dominoes transfer energy from one to the next, without any one domino having to move the whole distance across the table.

**wave** – a repeating pattern with a specific wavelength, frequency, and amplitude

## Look Out!



Electromagnetic waves can transfer energy through space and do not need a medium.





Mechanical waves must transfer energy through a medium.

Although *electromagnetic waves*, or light waves, are also oscillations that transfer energy, they travel through space and do not need a medium.

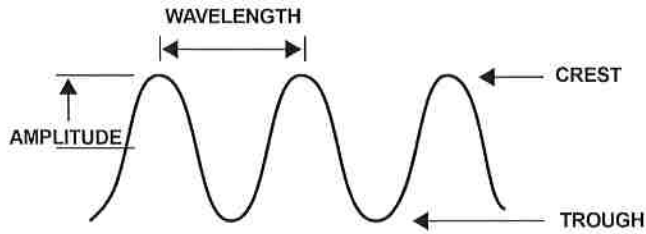
We will focus on the waves that do transfer energy through a medium, which are called *mechanical waves*.

Two types of mechanical waves that travel through a medium are *transverse* and *longitudinal* waves.

Transverse Waves	Longitudinal Waves
	
Propagate perpendicular to wave displacement.	Propagate parallel to wave displacement.
Seismic S waves, Rope waves, Slinky waves (up and down)	Seismic P waves, Sound waves, Spring waves (back and forth)

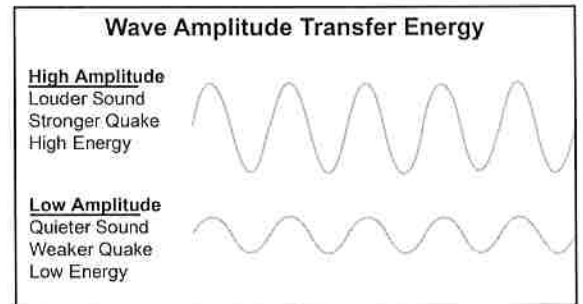
# Introduction to Properties of Waves

## Reflect



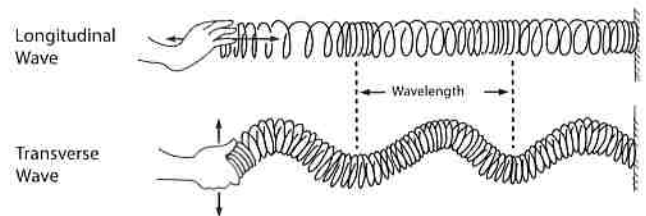
The repeating pattern of a wave has special characteristics. The highest point a wave reaches above equilibrium (midline) is its *crest*, and the lowest point a wave reaches below equilibrium is its *trough*. Waves are measured by their amplitude, wavelength, and frequency.

The *amplitude* is the vertical distance from its equilibrium point to its crest. Therefore, amplitude equals half the vertical distance from crest to trough. In sound waves, amplitude corresponds to loudness; as the wave amplitude increases, so does the loudness of the sound and the energy. The waves with the most amplitude are the loudest and have the most energy.

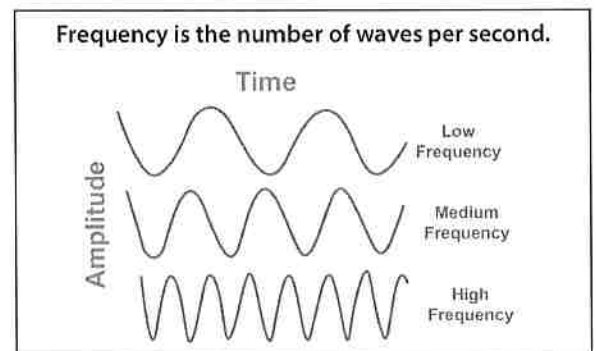


The *wavelength* ( $\lambda$ ) is the distance between consecutive crests (or consecutive troughs). Wavelength is represented by the Greek letter *lambda* ( $\lambda$ ). Wavelength determines which waves we can sense. Humans can hear sound waves with wavelengths between about 0.02 m (high pitches) and 20 m (low pitches).

Wavelength is measured from one point to the next identical point



*Frequency* ( $f$ ) is a measure of the number of times a wave cycles per unit of time (typically 1 second). Frequency is measured in units of hertz (Hz); 1 hertz equals 1 cycle per second ( $1/s$ , or  $s^{-1}$ ). Therefore, a wave with a frequency of 100 Hz cycles 100 times in 1 second. So, frequency is also defined as the number of waves that pass a certain point in 1 second. Waves with higher frequencies have more energy.



There is a very significant mathematical relationship between a wave's frequency and the amount of energy transferred by the wave: the amount of energy transferred by waves in a given time is proportional to its frequency. This simply means that if a wave's frequency doubles, the amount of energy being transferred by the wave doubles.

# Introduction to Properties of Waves

## What Do You Think?

Consider the following relationships.

**Amplitude and pitch are not connected.** Loud or soft sound waves that are different amplitudes vary in height. High notes and low notes that are different pitches vary in frequency (number of waves each second).

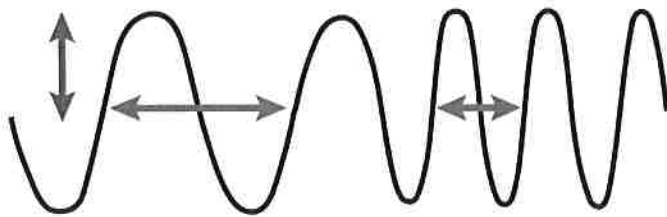
**Amplitude and volume (loudness) are connected.** Louder notes have greater amplitudes than softer notes.

**Amplitude and energy of sound are connected.** The amplitude of a wave is the result of the amount of energy in the wave. If there are two waves that are the same except for the amplitude, the wave with the larger amplitude is the wave carrying the most energy. There is a very significant mathematical relationship between amplitude and energy in a wave: *the energy of the wave is proportional to the square of the amplitude*. This means that if the amplitude, or height, of a water wave is doubled, each wave will have four times the energy of the original height (amplitude).

**Amplitude and frequency are not connected.** Adjusting amplitude does not cause a change in a wave's wavelength or frequency.

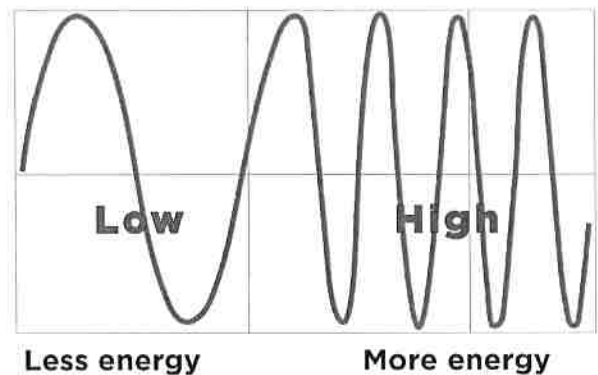
**Frequency corresponds to pitch and energy.** The higher a sound is, the higher the wave frequency is and the more energy it has. Conversely, the lower the sound is, the lower the frequency and energy are.

## Amplitude > loudness



## Frequency > pitch

## Frequency



### To summarize:

- the amount of energy transferred by waves in a given time is proportional to the frequency;
- the energy of a wave is proportional to the square of the amplitude;
- in a sound wave, frequency determines pitch; and
- in a sound wave, amplitude determines volume.

# Introduction to Properties of Waves

## Try Now

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The *wave equation* expresses the mathematical relationship among wave velocity, frequency, and wavelength. If you know two of the three factors of a simple wave equation, you can solve for the missing third factor:  $v = \lambda \times f$ .

$v$  = wave velocity, the speed that waves are moving in a direction (m/s)

$\lambda$  = wavelength, the distance between wave crests (m)

$f$  = frequency, the number of wave crests that go through a point in a certain time (cycles/s or Hz)

You can also calculate the amount of time it takes for one wave to pass. The reciprocal of frequency ( $1/f$ ) is called a *wave's period* ( $T$ ). Period is a measure of the time it takes a wave to complete one cycle, or to move the distance of one wavelength. Wave period is measured in seconds:  $T = 1/f$ .

Solve the following problems.

If a dolphin is producing a vocalization with a frequency of 35 Hz, traveling at 1,470 m/s, what is the wavelength of the sound?

A sound wave with a wavelength of 2.5 m travels 660 m in 2 s. Calculate the frequency of the wave. (To calculate the speed of sound, remember: speed = distance/time.)

The D string on a violin has a frequency of 293 Hz when it is in tune. Calculate the period.

## Answer Key

### Introduction to Properties of Waves

1.  $\lambda = v/f$

$$\lambda = (1,470 \text{ m/s})/35 \text{ Hz}$$

$$\lambda = 42 \text{ m}$$

2.  $f = v/\lambda$

$$f = (660 \text{ m/2 s})/2.5 \text{ m}$$

$$f = 132 \text{ Hz}$$

3.  $T = 1/f$

$$T = 1/293$$

$$T = 0.0034 \text{ seconds}$$



# Lesson 1: Challenges for a New Millennium

## Main Idea

**George W. Bush won the disputed 2000 presidential election.**  
The 2000 Presidential Election.

The United States was at peace and enjoying economic prosperity as the 2000 presidential election neared. The Democrats chose Al Gore, who had served as Bill Clinton’s vice-president, as their nominee. The Republican candidate was Texas governor George W. Bush, the son of former president George H. W. Bush.

## Campaign Issues

One major campaign issue was how to use the federal budget surplus, which totaled nearly \$100 billion in 1999. Gore said he would put more money into education and health care, and use some of the surplus to pay off a part of the national debt. Bush promised to return the money to taxpayers through tax cuts. Bush and Gore also debated the role that the United States—now the world’s only superpower—should play in global affairs. Campaign polls showed that the race was very close.

On election night, the voting in some states was so close that no winner could be declared right away. It was so close in Florida that the votes had to be recounted. A machine recount found that Bush had received a few hundred more votes than Gore. But Gore supporters wanted the votes in four counties to be counted by hand. They argued that this would ensure all votes were counted. The Bush campaign challenged this in court.

After several weeks of suspense, the Supreme Court ruled. The Supreme Court said that the manual recounts could not ensure that all votes would be counted the same way. They ordered the recount to stop. Florida’s 25 electoral votes went to Bush, making him the winner of the election with 271 electoral votes to Gore’s 266. The final popular vote tally was 50,459,211 for Bush and 51,003,894 for Gore. Bush was the first president in more than 100 years to win the electoral vote but lose the popular vote.





At his inauguration, President Bush urged Americans to come together.

*"This is my solemn pledge: I will work to build a single nation of justice and opportunity . . . Today, we affirm a new commitment to live out our nation's promise through civility, courage, compassion, and character."*

—George W. Bush

*Inaugural Address, January 20, 2001*

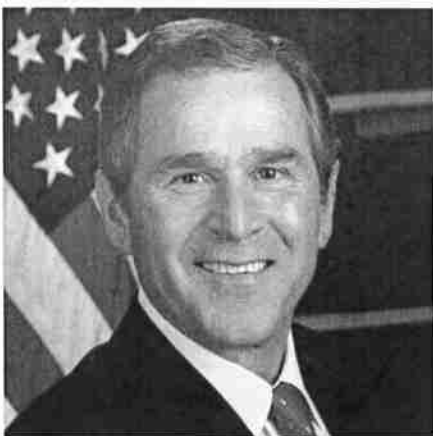
### Bush's Early Days in Office

The disputed election, however, caused lingering bitterness between Democrats and Republicans. Republicans held a small majority in the House of Representatives, while the Senate was split 50–50. When votes in the Senate are tied, the vice-president casts the tiebreaking vote. This gave Vice President Dick Cheney an important role in helping to pass Republican legislation.

#### BIOGRAPHY

### George W. Bush

1946–



George W. Bush was born in Connecticut and grew up mainly in Texas. His family has a long history in politics. His grandfather was a U.S. senator. His father served as president from 1989 to 1993. Bush was a member of the National Guard during the Vietnam War. Then he attended Harvard Business School. He was unsuccessful when he ran for Congress in 1978. He started several oil businesses in Texas. He also became part owner of the Texas Rangers baseball team. He was elected governor of Texas in 1994 and 1998. In 2000 he defeated Al Gore in one of the closest presidential races in American history.

Bush appointed General Colin Powell to the key position of secretary of state. Powell became the first African American to hold this office.

Throughout his campaign, Bush had promised voters that he would cut taxes. Once in office, the new president carried through with his promise. Six months after his inauguration, he signed into law a \$1.35 trillion tax-cut plan.

### Tax Relief Legislation

In June 2001 President Bush signed a tax reform bill into law.

*"Tax relief is an achievement for families struggling to enter the middle class. For hard-working lower income families, we have cut the bottom rate of Federal income tax from 15 percent to 10 percent. . . .*

*Tax relief makes the code more fair for small businesses and farmers and individuals by eliminating the death tax. Over the long haul, tax relief will encourage work and innovation. It will allow American workers to save more on their pension plan or individual retirement accounts.*

*Tax relief expands individual freedom. The money we return, or don't take in the first place, can be saved for a child's education, spent on family needs, invested in a home or in a business or a mutual fund or used to reduce personal debt.*

*The message we send today: It's up to the American people; it's the American people's choice. We recognize, loud and clear, the surplus is not the Government's money. The surplus is the people's money, and we ought to trust them with their own money."*

—President George W. Bush remarks on signing the Economic Growth and Tax Relief Reconciliation Act, June 7, 2001

President Bush also signed an education reform plan called No Child Left Behind in the early days of his presidency. This created a national set of standards for every student and every school to meet. It also raised funding for schools.

### Main Idea

**Americans debated the future of the War on Terror that began after terrorists attacked the United States.**

### Fighting Terrorism

Despite many plans for educational and economic reform, President Bush was soon faced with the challenge of confronting terrorism. His administration became focused on developing a foreign policy to protect Americans from the growing threat of terrorist attacks after the events of September 11, 2001.

### September 11, 2001

On September 11, 2001, terrorists took control of four commercial airliners. The hijackers used them as weapons to attack sites in Washington, DC, and New York City. They flew an airplane into each of the two towers of the World Trade Center, an important business center in New York City. The resulting fires caused the buildings, which at the time of their construction in 1973 had been the tallest in the nation, to crumble to the ground with many people inside. Another airplane was flown into the Pentagon, the headquarters of the Department of Defense located outside of Washington, DC. A fourth airplane crashed in a Pennsylvania field. About 3,000 people were killed in the attacks. These included the airplane passengers, workers and visitors in the World Trade Center and the Pentagon, and rescue workers aiding the victims.

The tragedy brought Americans together as a wave of grief and anger gripped the nation. At the same time, recognition of the bravery of those who responded to the disaster gave people comfort and strength. The heroism of New York's rescue workers struck awe in people throughout the nation and the world. Several hundred firefighters and police officers had run willingly into the burning towers, only to perish when they collapsed.

There were also reports that the plane that crashed in Pennsylvania may have been forced down by the heroic actions of its passengers. Telephone calls from passengers aboard the plane indicated they knew about the other attacks and had decided to stop the terrorists on board from hitting their next target.

Inspired by these stories, Americans reached out to the victims of 9/11. Blood collection centers received two-and-a-half times the normal donations in the days after 9/11. Millions of dollars poured into charities. Rescue workers from around the country traveled to New York to help with the recovery efforts at Ground Zero, the site where the Twin Towers had stood.

*"The camaraderie among the workers in the zone reminds me of the stories we've heard about the World War, where men and women are thrown together by a common cause, share tragedies and victories, and are forever bound to one another by their effort."*

—Joel Meyerowitz

Determined to find and punish those responsible for the attacks, United States officials determined that the hijackers were members of a fundamentalist Islamic terrorist group in Afghanistan called al Qaeda, or “the Base.” The group was based in Afghanistan and was led by a wealthy Saudi Arabian exile, Osama bin Laden. The Taliban was an extreme Islamic group that ruled the country. After Taliban leaders refused to turn over bin Laden, the United States took military action. In October 2001 the United States attacked Afghanistan. It drove the Taliban from power but failed to find and capture bin Laden. The United States then began helping Afghanistan to rebuild and establish a democratic government.

## War in Iraq

After the attack on Afghanistan, attention turned to Iraq. President Bush argued that Saddam Hussein, the dictator of Iraq, posed an immediate threat to U.S. security. When the Persian Gulf War ended in 1991, Saddam had agreed to give up Iraq’s weapons of mass destruction. These are chemical, biological, or nuclear weapons that can kill thousands. However, Saddam failed to fully cooperate with UN weapons inspectors. Leaders from France, Germany, and Russia argued that the UN inspectors should be given more time to search for weapons. President Bush and British prime minister Tony Blair disagreed. They said Iraq should be forced to comply with the weapons ban. On March 20, 2003, the United States and a coalition of allies launched a ground attack on Iraq. Saddam’s government collapsed, and Saddam was eventually captured.



### End of a Regime

Iraqis pull down a statue of Saddam Hussein in 2003, an act that symbolizes the toppling of his regime.

As in Afghanistan, U.S. officials began working with Iraqis to establish a democratic government. Violence continued, however. U.S. soldiers and Iraqis who were working to rebuild the country were attacked. Iraqi voters elected new government leaders and approved a new constitution in 2005. In 2006 an Iraqi court sentenced Saddam to death. He was executed a short time later. Deep divisions among Iraqis remained an issue, however, threatening the stability of the new government.

## Main Idea

**The American economy and job market rapidly changed and affected domestic policy.**

### The New Global Economy

In addition to the issues the nation faced overseas, the Bush administration and later the administration of President Barack Obama confronted a variety of domestic problems. These challenges ranged from unemployment to the national debt.

In public opinion polls taken in 2010, Americans listed economic recovery and unemployment among the most important challenges facing the United States. Other major concerns included health insurance reform, terrorism, and immigration. The growing national debt was another key concern. After several years of surpluses, the government began running a deficit again in 2002. Slow economic growth, the cost of the war in Iraq, and tax cuts all contributed to the rising budget imbalance. Beginning with the 2010 budget, the deficit was expected to fall from previous years but remain high as a percentage of Gross Domestic Product (GDP). The GDP is the value of all goods and services produced in a country each year.

## Financial Crises Affect Americans

### Financial Crisis



Slowing home sales and failed investments led to an economic downturn. The federal government helped by making payments to several banks and manufacturing firms.

The American economy has experienced important ups and downs in recent years. During the 1990s the stock market boomed, and unemployment fell to its lowest level in 30 years. Internet companies and other high-tech firms powered much of this economic growth. When some high-tech firms failed to earn profits, their stocks lost value. Many went out of business. Unemployment began rising again. Large investment firms suffered huge losses due to their investments in risky mortgages. Amid controversy, the federal government provided money to help these firms recover.

### Changes in American Industry

In recent years, many traditional industries have declined in importance to the U.S. economy. Many textile companies, for example, have closed mills. They've shifted their operations to countries where labor is less expensive. There has also been an increased use of computer-driven robots to make manufactured goods. This has often eliminated many jobs. This is part of a larger trend in which the percentage of Americans working in manufacturing has steadily fallen. The U.S. economy has moved toward becoming a service economy. This means that most people have jobs providing services, such as medical care or entertainment, rather than producing goods.

By the end of the 1990s, about 75 percent of American workers were employed in jobs in the service industry. By 2010 this number had risen to above 80 percent and keeps rising. Health care, computer engineering, and education are expected to be among the fastest-growing fields. Such predictions are based partly on population trends. As the number of older Americans increases, for example, so will the need for nurses and other health-care professionals.

### Globalization and the U.S. Economy

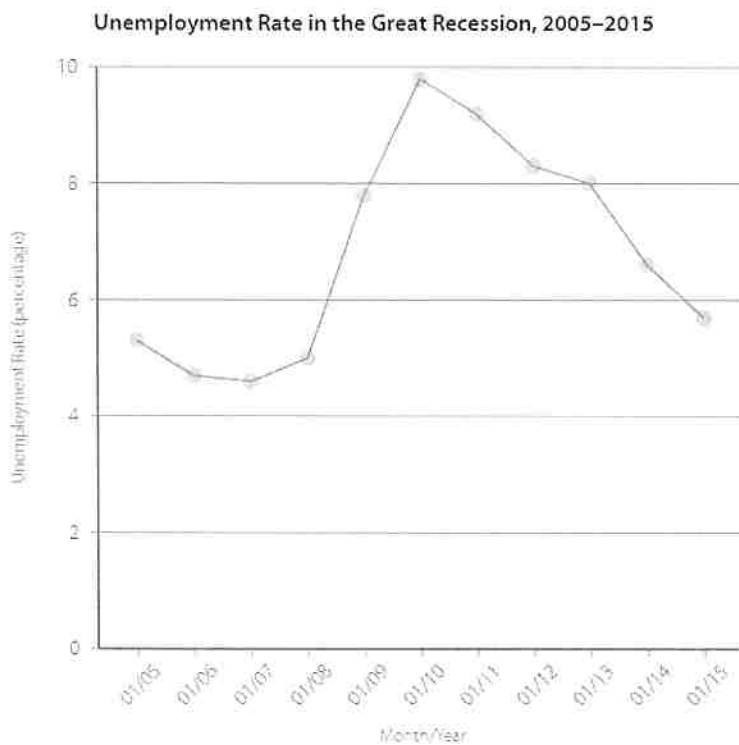
Another ongoing change in our modern economy is the process of globalization—growing connections among economies and cultures all over the world. Multinational corporations, or companies that do business in more than one country, play a large part in globalization. For example, you can find American fast-food restaurants in Russia and Japanese car factories in the United States. Increasing international trade has also contributed to globalization. The use of computerized manufacturing processes has sped up and increased productivity. This has improved the standard of living in many countries, providing more international trade opportunities. In 1995 more than 120 nations joined to form the World Trade Organization (WTO). The WTO's goal is to promote international trade by removing political and economic trade barriers between nations.



### The Global Automobile Industry

The growth of the global economy has affected many businesses, especially the automobile industry. Automakers can now buy parts from countries all around the world, depending on where they can get the best price.

At the start of the twenty-first century, the global economy began to slow down. In 2001 the economies of more than a dozen countries were in recession. Many other countries reported lower growth rates. Foreign investment to developing countries declined, damaging their economies. The U.S. economy also weakened.



Source: Bureau of Labor Statistics

By 2004 both U.S. and world economies began to recover. However, several major banking firms collapsed and began a global financial crisis in late 2007. Even financially secure banks cut back on their lending. This meant that many businesses could not get the money to invest in new inventory. They could not hire new employees and sometimes had trouble paying their existing workers. The stock market dipped. Unemployment rose quickly. The United States was in an economic recession.

To pull the country out of the recession, the U.S. government passed legislation intended to boost investment in the public and private sectors. Approved by President Bush in 2008, the Troubled Asset Relief Program committed \$475 billion to stabilize the U.S. banking and automobile industries. Later, President Obama signed into law the American Recovery and Reinvestment Act of 2009. This program distributed over \$8 billion in funds to individuals through tax credits and programs such as Medicaid, food stamps, and unemployment benefits. ARRA also awarded grants and loans for government contracts to American businesses. These actions added jobs, increased GDP, and reduced unemployment in 2009. A slow economic recovery began.

## The Twenty-First Century

### Lesson 1



#### MAIN IDEAS

1. George W. Bush won the disputed 2000 presidential election.
2. Americans debated the future of the War on Terror that began after terrorists attacked the United States.
3. The American economy and job market rapidly changed and affected domestic policy.

### Key Terms and People

**Al Gore** Bill Clinton's vice-president; Democratic presidential nominee in 2000

**George W. Bush** U.S. president elected in 2000

**World Trade Center** important business center in New York City

**Pentagon** headquarters of the U.S. Department of Defense, near Washington, DC

**al-Qaeda** fundamentalist Islamic terrorist group

**Osama bin Laden** wealthy Saudi exile who led al-Qaeda

**weapons of mass destruction** weapons capable of killing thousands of people

**service economy** most jobs are providing services rather than producing goods

**globalization** growing connections between economies and cultures worldwide

### Lesson Summary

#### THE 2000 PRESIDENTIAL ELECTION

The 2000 election was a race between Democrat **Al Gore**, Bill Clinton's vice-president, and Republican **George W. Bush**, son of the former president and governor of Texas.

The votes were too close on election night to declare either candidate a winner. In Florida, a recount was needed. The winner in Florida would win the election. Gore supporters asked for a manual recount in several counties. The Supreme Court ruled against the manual recount. Bush was declared the winner. He became the first president in more than 100 years to win the electoral vote but not the popular vote. Congress soon passed the \$1.35 trillion tax-cut plan Bush had promised.

Why was the vote count in Florida so important in the 2000 election?

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Lesson 1, *continued*

**FIGHTING TERRORISM**

On September 11, 2001, two airplanes crashed into the **World Trade Center** in New York City. Another plane crashed into the **Pentagon**. A fourth plane crashed in rural Pennsylvania. Terrorists had hijacked all these planes. The hijackers were part of a terrorist group called **al-Qaeda**, led by **Osama bin Laden**. Thousands of people were killed. President Bush vowed to punish those responsible.

In October 2001 the United States attacked Afghanistan, where al-Qaeda was based. U.S. troops drove Afghanistan's leaders, the Taliban, from power. However, bin Laden could not be located until many years later.

President Bush and other world leaders thought that Iraqi leader Saddam Hussein posed a threat. They believed that he had not given up Iraq's **weapons of mass destruction**. Some countries wanted to keep looking for weapons. However, a coalition of allies led by the United States and Britain attacked Iraq. Saddam's government had been toppled. Yet, the war dragged on.

What type of attacks did al-Qaeda terrorists use on September 11, 2001?

\_\_\_\_\_

\_\_\_\_\_

Circle the name of the country in which American officials expected to find Osama bin Laden.

**THE NEW GLOBAL ECONOMY**

The country has moved toward a **service economy**. Also, **globalization** has changed how companies do business. It also has changed how countries interact.

A financial crisis began in 2007 when the housing market collapsed. The United States had entered an economic depression. The government passed legislation to try to help the country's economy. These stimulus efforts added jobs, increased GDP, and lowered unemployment. The country's economy began to recover over time.

How did the United States government help rebuild the country's economy?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Lesson 1, *continued*

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**CHALLENGE ACTIVITY**

**Critical Thinking: Make Judgments** Do you think the decision to attack Iraq was justified? Why or why not?

Al Gore	globalization	service economy
al-Qaeda	Osama bin Laden	weapons of mass destruction
George W. Bush	Pentagon	World Trade Center

**DIRECTIONS** Use at least seven terms or names from the word bank to write a summary of what you learned in the lesson.

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**DIRECTIONS** Write two adjectives or descriptive phrases that describe the term or person.

1. Al Gore \_\_\_\_\_  
\_\_\_\_\_
2. World Trade Center \_\_\_\_\_  
\_\_\_\_\_



Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

Lesson 1, *continued*

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3. al-Qaeda \_\_\_\_\_

\_\_\_\_\_

4. Osama bin Laden \_\_\_\_\_

\_\_\_\_\_

5. globalization \_\_\_\_\_

\_\_\_\_\_

# Answer Key

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

## The Twenty-First Century

### Lesson 1



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#### THE 2000 PRESIDENTIAL ELECTION

The 2000 election was a race between Democrat **Al Gore**, Bill Clinton's vice-president, and Republican **George W. Bush**, son of the former president and governor of Texas.

The votes were too close on election night to declare either candidate a winner. In Florida, a recount was needed. The winner in Florida would win the election. Gore supporters asked for a manual recount in several counties. The Supreme Court ruled against the manual recount. Bush was declared the winner. He became the first president in more than 100 years to win the electoral vote but not the popular vote. Congress soon passed the \$1.35 trillion tax-cut plan Bush had promised.

**Why was the vote count in Florida so important in the 2000 election?**

The election was so close that whoever won Florida would win the national election.

Lesson 1, *continued***FIGHTING TERRORISM**

On September 11, 2001, two airplanes crashed into the **World Trade Center** in New York City. Another plane crashed into the **Pentagon**. A fourth plane crashed in rural Pennsylvania. Terrorists had hijacked all these planes. The hijackers were part of a terrorist group called **al-Qaeda**, led by **Osama bin Laden**. Thousands of people were killed. President Bush vowed to punish those responsible.

In October 2001 the United States attacked Afghanistan, where al-Qaeda was based. U.S. troops drove Afghanistan's leaders, the Taliban, from power. However, bin Laden could not be located until many years later.

President Bush and other world leaders thought that Iraqi leader Saddam Hussein posed a threat. They believed that he had not given up Iraq's **weapons of mass destruction**. Some countries wanted to keep looking for weapons. However, a coalition of allies led by the United States and Britain attacked Iraq. Saddam's government had been toppled. Yet, the war dragged on.

**THE NEW GLOBAL ECONOMY**

The country has moved toward a **service economy**. Also, **globalization** has changed how companies do business. It also has changed how countries interact.

A financial crisis began in 2007 when the housing market collapsed. The United States had entered an economic depression. The government passed legislation to try to help the country's economy. These stimulus efforts added jobs, increased GDP, and lowered unemployment. The country's economy began to recover over time.

**What type of attacks did al-Qaeda terrorists use on September 11, 2001?**

They crashed hijacked passenger planes into important buildings.

**Circle the name of the country in which American officials expected to find Osama bin Laden.**

**How did the United States government help rebuild the country's economy?**

It passed legislation to stimulate the economy, creating jobs, increasing GDP, and decreasing unemployment.

Lesson 1, *continued*

**CHALLENGE ACTIVITY**

**Critical Thinking: Make Judgments** Do you think the decision to attack Iraq was justified? Why or why not?

Answers will vary. Arguments that the attack was justified include the terrorist threat to the United States and the possibility that Saddam Hussein had weapons of mass destruction. Arguments that the attack was not justified include that the Iraqis did not attack the United States and that it was not certain that Saddam had weapons of mass destruction.

Al Gore	globalization	service economy
al-Qaeda	Osama bin Laden	weapons of mass destruction
George W. Bush	Pentagon	World Trade Center

**DIRECTIONS** Use at least seven terms or names from the word bank to write a summary of what you learned in the lesson.

Summaries will vary but may include the following: The presidential election involving Al Gore and George W. Bush had to be settled by the Supreme Court. Around nine months after Bush took office, the World Trade Center and the Pentagon were attacked by terrorists belonging to al-Qaeda. The United States attacked Afghanistan, hoping to destroy al-Qaeda and its leader, Osama bin Laden. The fight against terrorism occupied the U.S. government for the next few years. The government was especially worried about weapons of mass destruction, such as nuclear weapons. Recently the United States has shifted to a service economy and taken an active role in globalization.

**DIRECTIONS** Write two adjectives or descriptive phrases that describe the term or person.

1. Al Gore Clinton's vice-president; lost 2000 election
2. World Trade Center stood in New York City; attacked by terrorists in 2001

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

Lesson 1, *continued*

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3. al-Qaeda responsible for the attacks of September 11; based in Afghanistan

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4. Osama bin Laden led al-Qaeda; pursued for many years and caught in 2011

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5. globalization changed businesses; caused greater interaction among countries

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