



CBSD FID WORKBOOK

GRADE 4

Name: _____



FLEXIBLE INSTRUCTION

DAY 3





What is a Flexible Instructional Day also known as a “FID” Day?

In Pennsylvania, a flexible instructional day, as defined by the Department of Education, refers to a day when schools can deliver instruction remotely rather than canceling school due to inclement weather or other unforeseen circumstances.

What is the purpose of a Flexible Instructional Day?

The purpose of implementing flexible instructional days is to ensure that students continue to receive meaningful instruction even when traditional “in-person” learning is not possible. Flexible instructional days allow schools to maintain continuity in the educational process, ensuring that students can continue their learning without interruption. By utilizing technology and remote learning workbooks/resources, schools can provide students with access to instructional materials, assignments, and teacher support, regardless of physical location.

How will I know when Central Bucks is having a “FID” day?

- Central Bucks School District will send notifications to families via email, website, text notification, social media, etc. to communicate the “FID” day.
- Your child's teacher will publish the FID content in Canvas:
 - Link to an online survey for attendance.
 - Link to an **optional** live Teams call for teacher “Office Hours.”

How will my child use the “Flexible Instructional Books” on these “FID” days?

This “flexible instructional book” is your child's workbook that outlines the procedures, expectations, and resources for completing the work for a flexible instructional day. Here's how such a book will be used:

- The **Flexible Instructional Book** provides approximately 4 hours of instructional activities.
- Your child will complete reading, math, writing, and specials (*P.E., Music, Library, Art, or QUEST*) during the “FID” day.
- Your child will then return the “FID” book to their homeroom teacher when school resumes “in-person.”

How will my child use Canvas on these “FID” days?

- Students will access Canvas via Classlink on district provided device
- Attendance will be submitted via Canvas
- Office Hours will be offered via a Teams call linked in Canvas from 12:00-12:30
- Digital workbooks will be linked to Canvas

What if I need to use a personal device and can't find my students Username and password?

- Student usernames can be found in the Parent Portal of Infinite Campus. It is located in the “More” section of the Main Menu under “Family Information”. The username is the student's full email address. Ex: Smith.J123@student.cbsd.org. The password for new students is Uppercase first initial, lowercase last initial, and their 6 digit birthday. Ex: James Smith born on 07/08/2009 a password of Js070809



CBSD FID WORKBOOK

GRADE 4



MATH

DAY 3



FLEXIBLE INSTRUCTIONAL DAY 3: MATH

MATH LESSON SUMMARY

Activity #1 (15-25 min)		
F Fact Practice	 Reflex Math – Get the Green Light! <i>*If you do not have internet access you may play Math Towers and complete the multiplication sheet.</i>	
Activity #2: CHOOSE 1 ACTIVITY FROM THE 2 OPTIONS BELOW (15-20 min)		
I Independent Practice	Complete Multiplication Activity #1	Complete Multiplication Activity #2 Challenge Activity
Activity #3: CHOOSE 1 ACTIVITY FROM THE 2 OPTIONS BELOW (15 - 20 min)		
D Dive Into a Game	Multiplication Math Maze	Play “Dots and Boxes”

FACT PRACTICE

REFLEX MATH - Get the Green Light! Log into Classlink from any device. Only complete the Alternative Activity if you are unable to access Reflex Math.

ALTERNATIVE ACTIVITY:

$$\begin{array}{r} 3 \\ x \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 11 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ x \ 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ x \ 11 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ x \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ x \ 11 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ x \ 12 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ x \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ x \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ x \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ x \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ x \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ x \ 12 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ x \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ x \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ x \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 11 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ x \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ x \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ x \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ x \ 10 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ x \ 11 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ x \ 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ x \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ x \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ x \ 12 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ x \ 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ x \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ x \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ x \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ x \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ x \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ x \ 12 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ x \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ x \ 4 \\ \hline \end{array}$$

FACT PRACTICE

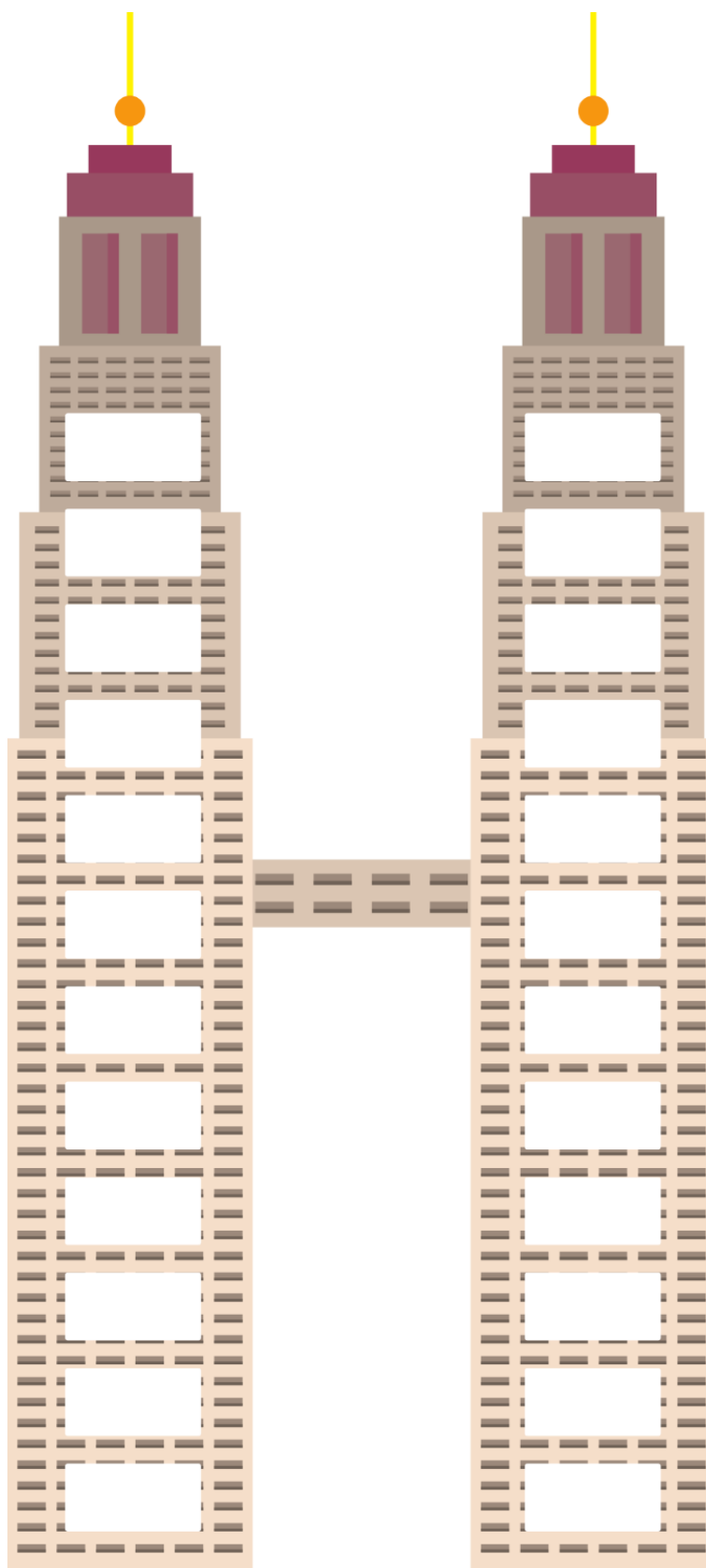
Materials:

- Spinner (0-12)
- Math Towers Game Sheet
- 24 Counters or connecting cubes to cover numbers (12 for each player)

Directions:

1. Choose the factor for the game.
2. Each player writes the 12 multiples for that factor (not including 0) on their tower.
3. The younger player goes first.
4. Player 1 spins the spinner and multiplies the number spun by the factor being practiced.
5. Player 1 covers the product on their tower.
6. If the number is already covered, the player loses a turn.
7. Player 2 then takes a turn.
8. The winner is the first one to cover all of the numbers on their tower.

MATH TOWERS



INDEPENDENT PRACTICE

MULTIPLICATION: ACTIVITY 1

Multiply. Show all your

$$\begin{array}{r} 134 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 152 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 499 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 235 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 246 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 127 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 126 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 185 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 358 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 167 \\ \times \quad 5 \\ \hline \end{array}$$

MULTIPLICATION: ACTIVITY 2

Challenge Activity

Ms. Rodney bakes 1,102 cookies. She packs the cookies into small bags. Each bag has 9 cookies. If 56 cookies are broken and discarded, what is the least number of bags Ms. Rodney needs to pack all the remaining cookies?

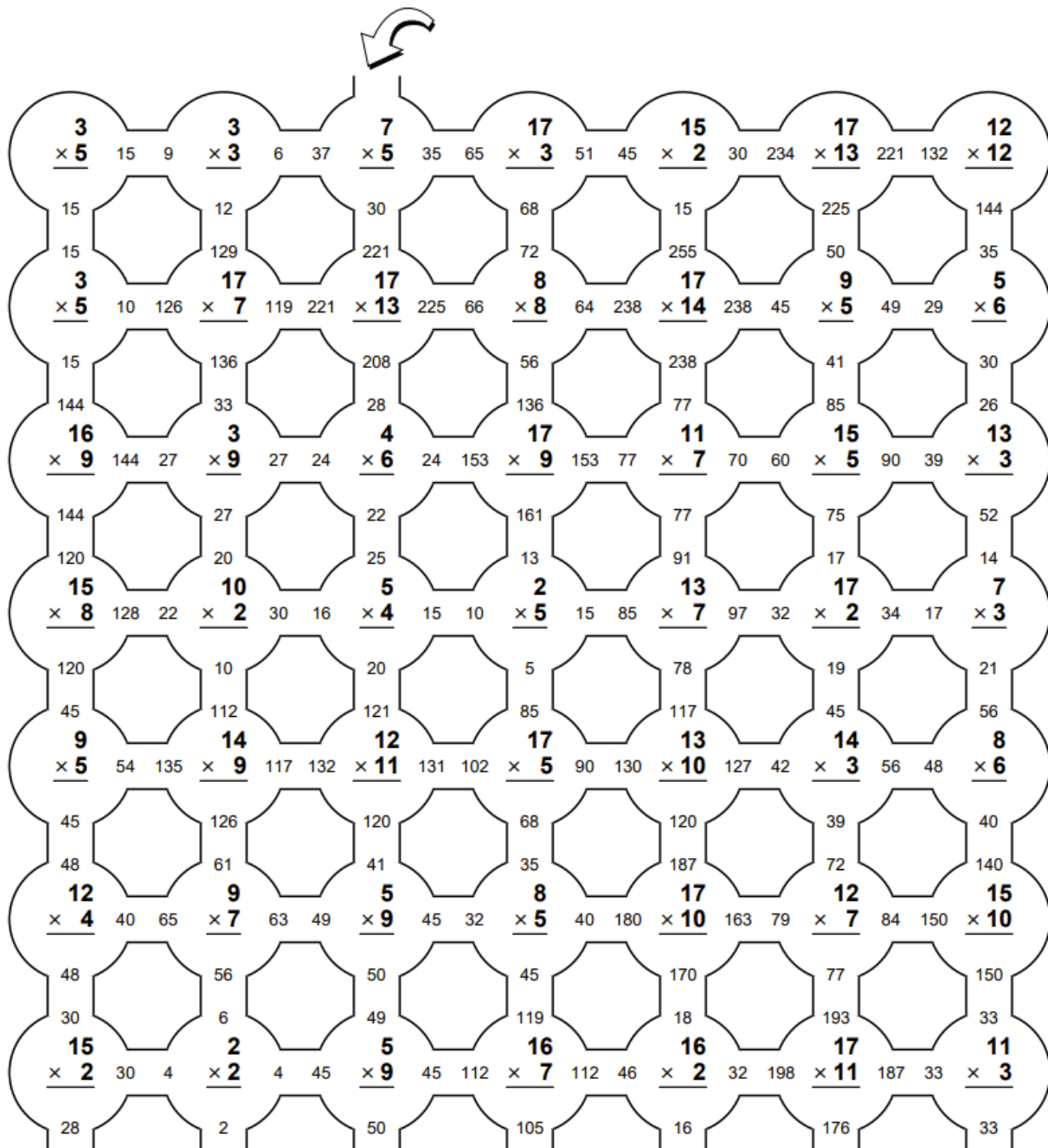
Kelvin made a mistake while solving this problem.
Explain the mistake. Find the correct answer.

$$\begin{array}{r} 4,075 \\ \times \quad 5 \\ \hline 2003525 \end{array}$$

Mr. Winters borrowed tables and chairs for a party. The number of chairs borrowed by Mr. Winters is 3 times the number of tables. If there are 80 legs on the furniture altogether, how many tables and chairs did Mr. Winters borrow?

MULTIPLICATION MATH MAZE

Find your way from top to bottom by following the path of correct answers. You can only exit a cell if the number matches the answer to the problem.



The maze consists of 10 rows and 7 columns of cells. Each cell contains a multiplication problem and its answer. An arrow at the top points to the start of the maze.

$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline 6 \end{array}$	$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$	$\begin{array}{r} 17 \\ \times 3 \\ \hline 51 \end{array}$	$\begin{array}{r} 15 \\ \times 2 \\ \hline 30 \end{array}$	$\begin{array}{r} 17 \\ \times 13 \\ \hline 221 \end{array}$	$\begin{array}{r} 12 \\ \times 12 \\ \hline 144 \end{array}$
15	12	30	68	15	225	144
$\begin{array}{r} 3 \\ \times 5 \\ \hline 10 \end{array}$	$\begin{array}{r} 17 \\ \times 7 \\ \hline 119 \end{array}$	$\begin{array}{r} 17 \\ \times 13 \\ \hline 225 \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$	$\begin{array}{r} 17 \\ \times 14 \\ \hline 238 \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline 49 \end{array}$	$\begin{array}{r} 5 \\ \times 6 \\ \hline 30 \end{array}$
15	136	208	56	238	41	30
$\begin{array}{r} 16 \\ \times 9 \\ \hline 144 \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline 27 \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline 24 \end{array}$	$\begin{array}{r} 17 \\ \times 9 \\ \hline 153 \end{array}$	$\begin{array}{r} 11 \\ \times 7 \\ \hline 70 \end{array}$	$\begin{array}{r} 15 \\ \times 5 \\ \hline 90 \end{array}$	$\begin{array}{r} 13 \\ \times 3 \\ \hline 39 \end{array}$
144	33	28	136	77	85	26
$\begin{array}{r} 15 \\ \times 8 \\ \hline 120 \end{array}$	$\begin{array}{r} 10 \\ \times 2 \\ \hline 20 \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$	$\begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$	$\begin{array}{r} 13 \\ \times 7 \\ \hline 91 \end{array}$	$\begin{array}{r} 17 \\ \times 2 \\ \hline 34 \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array}$
120	27	22	161	77	75	52
$\begin{array}{r} 9 \\ \times 5 \\ \hline 54 \end{array}$	$\begin{array}{r} 14 \\ \times 9 \\ \hline 126 \end{array}$	$\begin{array}{r} 12 \\ \times 11 \\ \hline 132 \end{array}$	$\begin{array}{r} 17 \\ \times 5 \\ \hline 85 \end{array}$	$\begin{array}{r} 13 \\ \times 10 \\ \hline 130 \end{array}$	$\begin{array}{r} 14 \\ \times 3 \\ \hline 42 \end{array}$	$\begin{array}{r} 8 \\ \times 6 \\ \hline 48 \end{array}$
45	112	121	5	78	19	21
$\begin{array}{r} 12 \\ \times 4 \\ \hline 48 \end{array}$	$\begin{array}{r} 9 \\ \times 7 \\ \hline 63 \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline 40 \end{array}$	$\begin{array}{r} 17 \\ \times 10 \\ \hline 170 \end{array}$	$\begin{array}{r} 12 \\ \times 7 \\ \hline 84 \end{array}$	$\begin{array}{r} 15 \\ \times 10 \\ \hline 150 \end{array}$
45	126	120	68	120	39	40
$\begin{array}{r} 15 \\ \times 2 \\ \hline 30 \end{array}$	$\begin{array}{r} 2 \\ \times 2 \\ \hline 4 \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$	$\begin{array}{r} 16 \\ \times 7 \\ \hline 112 \end{array}$	$\begin{array}{r} 16 \\ \times 2 \\ \hline 32 \end{array}$	$\begin{array}{r} 17 \\ \times 11 \\ \hline 187 \end{array}$	$\begin{array}{r} 11 \\ \times 3 \\ \hline 33 \end{array}$
48	56	50	45	170	77	150
28	2	50	105	16	176	33

DOTS AND BOXES

2 players

Materials:

2 dice, 1 gameboard (below)

Directions:

- Each player takes turns to roll both dice. Each player multiplies both numbers and looks for the product on the board. Then they draw a line to connect any 2 dots that form part of the square around that product.
- When a player draws a line that closes a square, the player gets to color in the square. The player rolls the dice again and takes another turn.
- When all of the dots have been connected, the player with the most squares colored in wins.



16	24	4	25	16	30	5	8	15	12
5	8	1	20	15	5	12	4	2	6
20	6	15	6	3	18	3	30	12	20
2	10	25	5	12	25	24	8	10	3
12	18	24	4	3	2	6	10	15	10
30	6	3	18	30	12	18	30	4	36
5	9	30	24	16	36	5	25	1	24
15	24	12	4	18	24	2	9	8	15
4	1	10	20	8	36	6	12	20	36
20	3	18	12	9	24	30	5	15	4



CBSD FID WORKBOOK

GRADE 4



READING AND WRITING

DAY 3



FLEXIBLE INSTRUCTIONAL DAY 3: READING AND WRITING

READING AND WRITING LESSON SUMMARY

Total Time – 90 Minutes		
Time	Focus	Description
90 Minutes	Reading/ Writing	1. Read the text “Inventions”. 2. Respond to the prompts and questions related to the text. 3. Complete the graphic organizer on page 29. 4. Write a summary of the text using information from the graphic organizer.
30 Minutes	Independent Reading	1. Read a self-selected book. 2. Complete the Reading Log.

READING AND WRITING - 90 Minutes

1. Read the Fast Facts and think about what you might already know about inventions.
2. Read the passages about inventions aloud or silently to yourself. Take as much time as you need.
3. Use the Building Connections page to write words or phrases to help you remember what is important.
4. Answer the Key Notes question at the end of each passage.
5. Answer the questions by going back into the text to find your answers.
6. Write a summary on the paper provided.
7. Please write in complete sentences with evidence from the text.

Inventions



Rebecca Schroeder uses the glow-in-the-dark clipboard that she invented to solve a problem.

Fast Facts

- The bicycle was invented in Europe and was first ridden in 1817.
- The first gas-powered car was used on the streets in 1886.
- A 10-year-old boy invented a glow-in-the-dark toilet seat.

What Is an Invention?

Today, we travel by car, watch television, and turn on lights. Not long ago, though, none of these things existed. Each one is an invention, and each has changed the world.³⁵

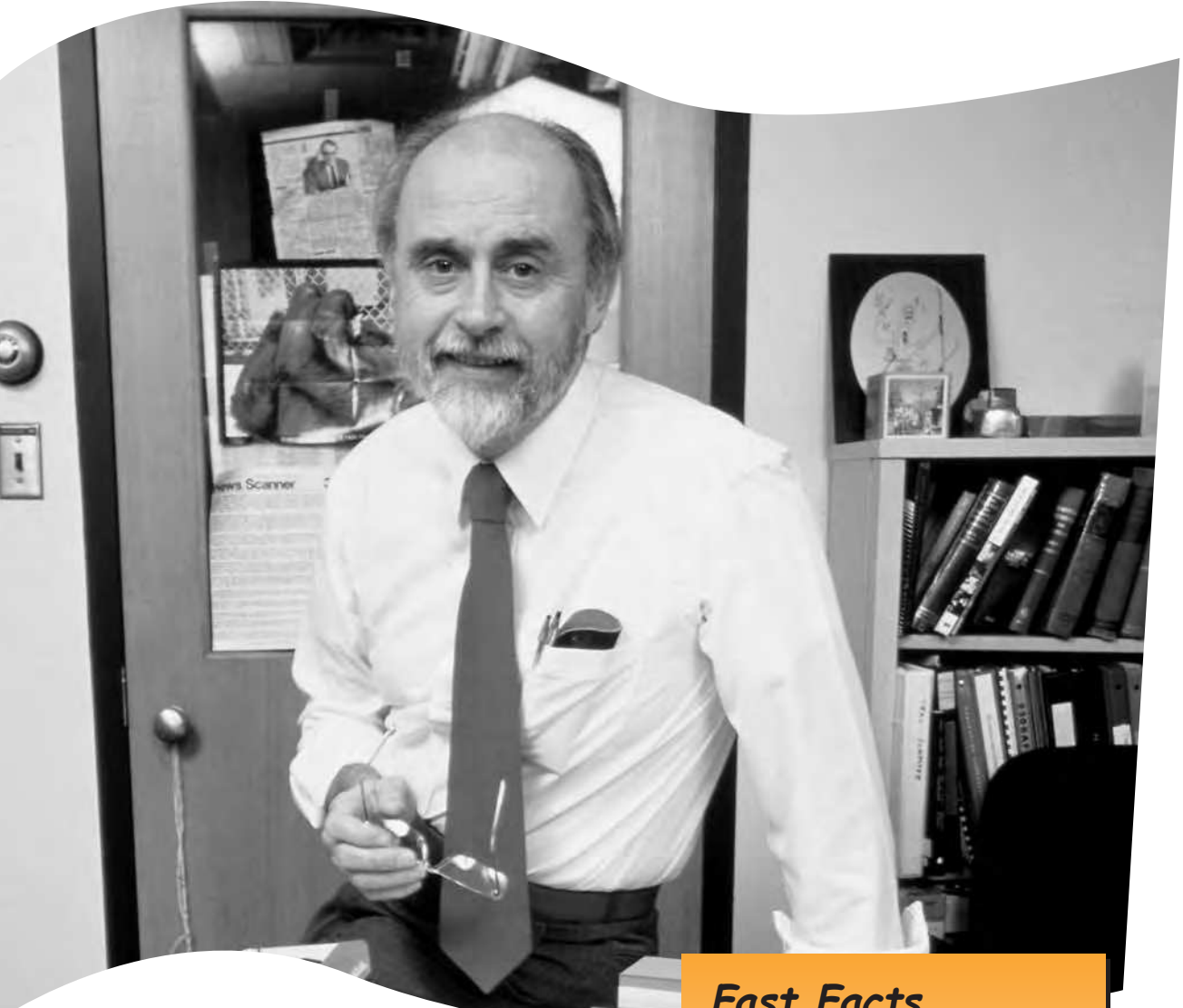
Sometimes inventions are created when people try to solve a problem. When Rebecca Schroeder couldn't see to do her⁵⁴ homework in the car after dark, she invented a glow-in-the-dark clipboard. Today, nurses in hospitals use this invention. Late at⁷⁷ night, hospital nurses can see to write notes without waking sick people because Rebecca Schroeder had a problem she solved by inventing something.¹⁰⁰

KEY NOTES

What Is an Invention?

What is one reason people invent things?

Inventions



Arthur Fry found a new use for a weak glue by inventing sticky notes.

Fast Facts

- Some bugs love to eat the glue on stamps.
- The oldest glue in the world is about 8,200 years old.
- People have made glue from fish, beeswax, flour, and egg whites.

Finding the Right Use

Sometimes researchers don't know they have invented something useful. A researcher named Spencer Silver created a²⁰ glue that was too weak to hold things together for a long time. Silver stopped working on the glue, but Arthur Fry thought he could use it.⁴⁷

Fry often lost his place in his songbook at church, so he put the weak glue on little pieces of paper and stuck them to the⁷³ pages of his songbook. The little pieces of paper helped Fry find his place, and the weak glue didn't harm the songbook. That's how sticky notes were created.¹⁰¹

KEY NOTES

Finding the Right Use

What problem did Arthur Fry have?

Inventions



Today, the Kevlar® in helmets helps protect people.

Fast Facts

- Kevlar vests protect police officers from gunshots.
- Hundreds of millions of dollars of Kevlar products are sold every year.
- Space suits are made of Kevlar.

An Invention That Saves Lives

In 1964, an inventor was looking for a way to make car tires stronger. Nothing she tried worked well. Then, she made²⁷ something unlike any material anyone had made. This new material was five times stronger than steel. The material, which became known as Kevlar, made car tires stronger and safer.⁵⁶

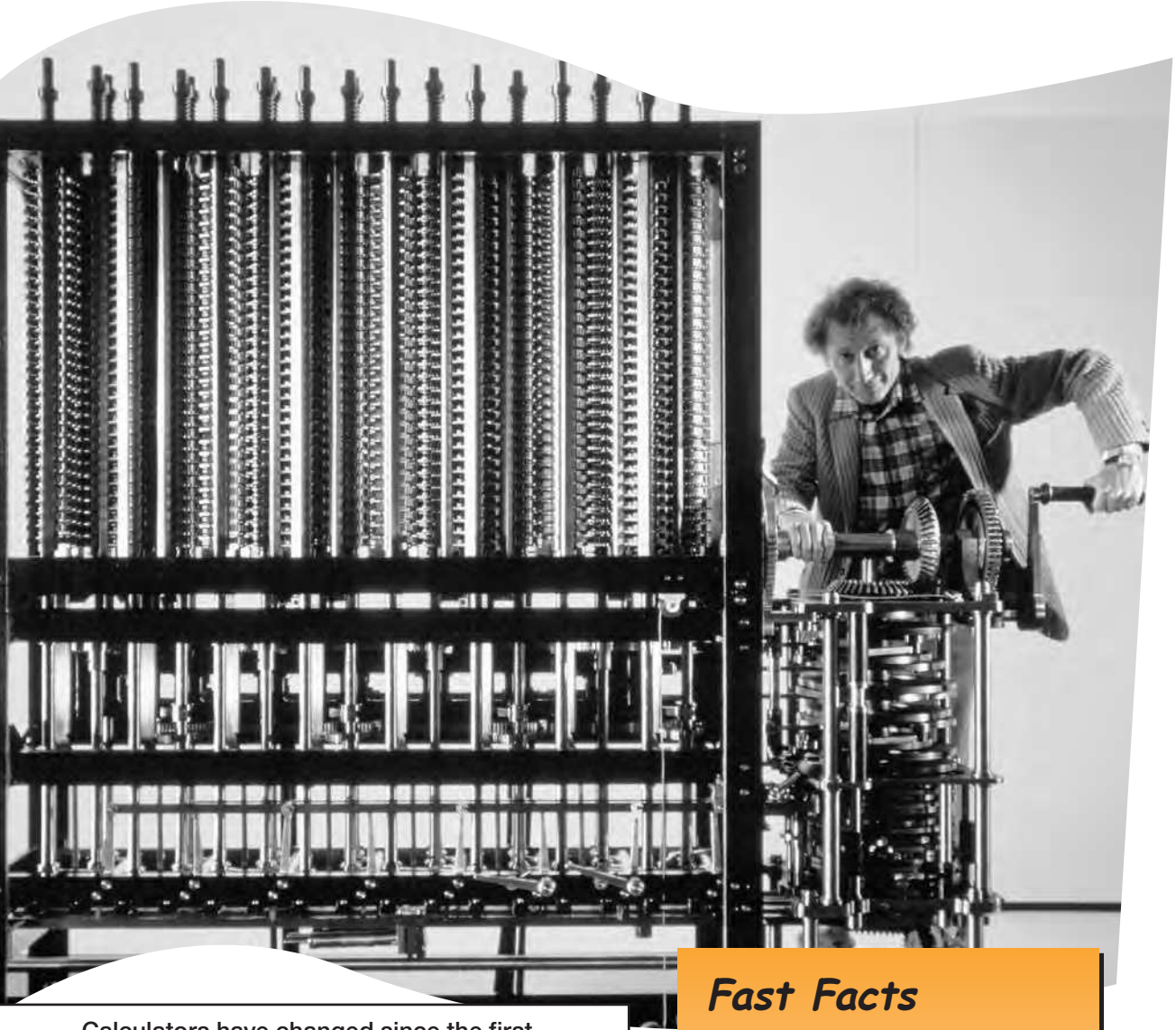
Kevlar can be used to save lives, too. It is used in helmets that people wear when they ride bikes, ski, or do other sports.⁸¹ These helmets keep people safe when they fall and hit their head. The Kevlar in the helmet protects the head inside it.¹⁰³

KEY NOTES

An Invention That Saves Lives

What is Kevlar?

Inventions



Calculators have changed since the first ones were invented.

Fast Facts

- An ancient kind of calculator, called an abacus, uses beads on a frame.
- The smallest calculator is only as big as ten molecules.
- Some of the first calculators weighed 55 pounds and cost \$2,500.

An Invention That Keeps Changing

Some inventions, like calculators, keep getting better.

Calculators are like adding machines. People use them to add numbers and to solve other kinds of math problems.³¹

At first, calculators were so huge they took up a whole room. The first calculators were also very expensive, and it took many people to use them.⁵⁸

Today, all that has changed. Calculators are no longer expensive. People can buy them for a few dollars. They are⁷⁸ small, too. Some are smaller than a person's hand. These days, most people can buy and use calculators. Like many useful inventions, calculators keep getting better.¹⁰⁴

KEY NOTES

An Invention That Keeps Changing

Why might an invention keep changing?

Inventions

What Is an Invention?

1. What is an invention?

- a. a person who invents something
- b. a problem that needs to be solved
- c. a company that makes new things
- d. a new thing or new way of doing something

2. What problem was solved with a glow-in-the-dark clipboard?

- a. getting well in a hospital
- b. driving a car in the dark
- c. seeing well enough to write in the dark
- d. taking notes in school

3. How could a problem lead to an invention?

Finding the Right Use

1. The main idea of “Finding the Right Use” is _____

- a. anyone can be an inventor.
- b. all inventions can be useful in some way.
- c. a person invented a paper for songbooks.
- d. some inventions can be used in different ways.

2. Why did Spencer Silver stop working with glue?

3. How did Arthur Fry use Spencer Silver's glue?

An Invention That Saves Lives

1. Another good name for "An Invention That Saves Lives" is _____

- a. "How Kevlar Was Invented."
- b. "Women Inventors."
- c. "Helmets Save Lives."
- d. "Inventing Strong Tires."

2. Why was Kevlar invented?

3. Kevlar is good for sports helmets because it _____

- a. is a very strong material.
- b. bends very easily.
- c. keeps in heat well.
- d. does not cost a lot.

An Invention That Keeps Changing

1. “An Invention That Keeps Changing” is MAINLY about _____

- a. who uses calculators today.
- b. how people use calculators.
- c. how calculators keep getting better.
- d. how to invent a way to solve math problems.

2. What are two ways calculators have changed?

3. Describe an invention you know about that keeps changing.

invention	hospital	researcher	create
Kevlar	helmet	calculator	expensive

1. Choose the word from the word box above that best matches each definition. Write the word on the line below.

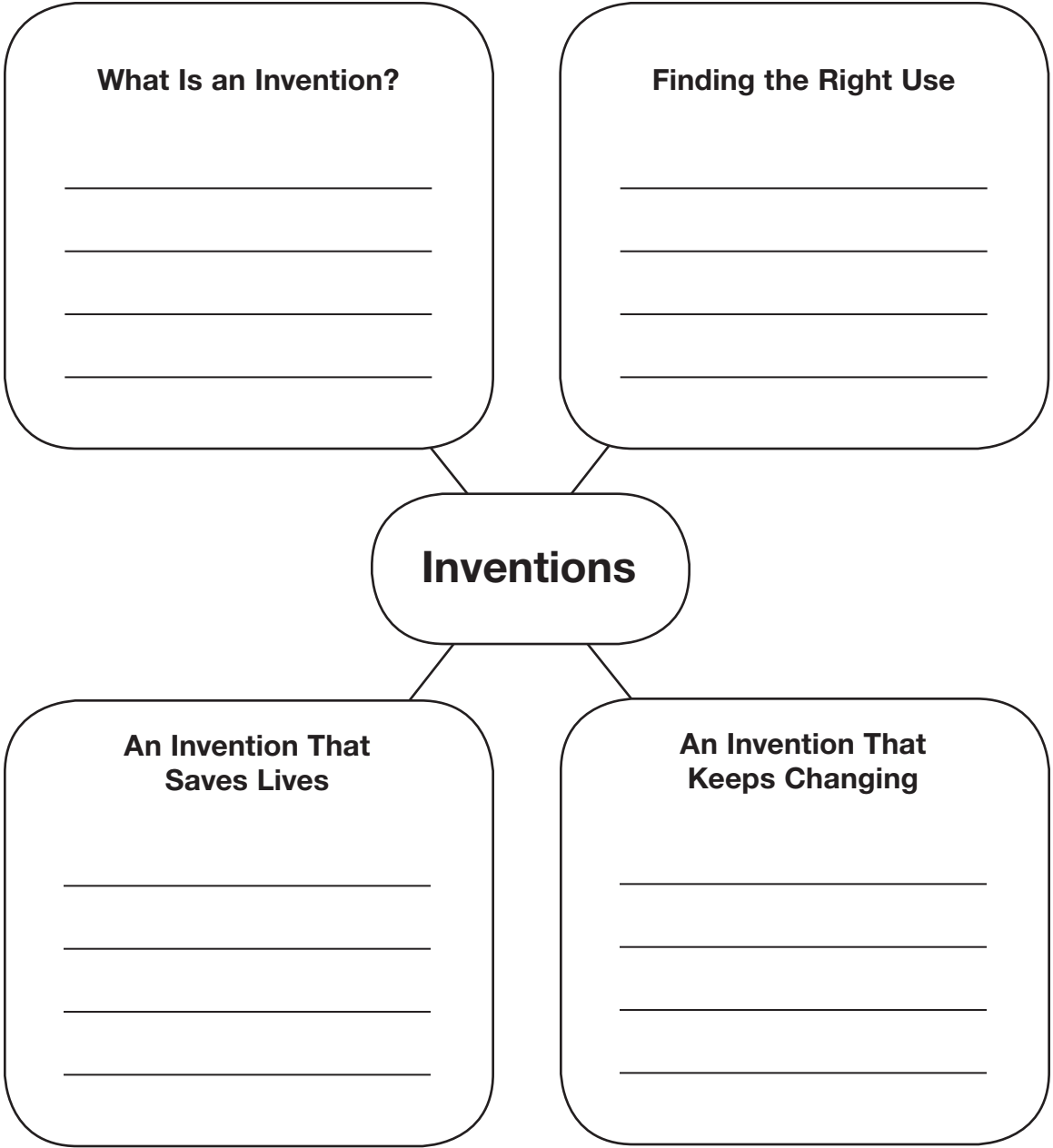
- A. _____ to make something new
- B. _____ a tool that does math quickly
- C. _____ a hat that keeps a person's head safe
- D. _____ something that someone made that did not exist before
- E. _____ a material that is very strong and is used to make tires
- F. _____ costing a lot of money
- G. _____ a place where doctors and nurses take care of the sick
- H. _____ a person who studies things

2. Fill in the blanks in the sentences below. Choose the word from the word box that completes each sentence.

- A. Because he wanted to stay safe, he wore a _____ when he went biking.
- B. The _____ studied how medicines worked in people.
- C. You might buy a shirt because it is less _____ than a similar one.
- D. _____ is often used in space suits because it is so strong.
- E. My friend broke her leg and had to go to the _____.
- F. An artist might use paints to _____ a painting.
- G. Because there were so many numbers to add, Bob used a _____.
- H. Maria thinks the phone is the best _____ because it changed so many lives.

Inventions

1. Use the idea web to help you remember what you read. In each box, write the main idea of that reading.



2. How are all inventions alike?

3. Describe how two of the inventions you learned about in this topic have made people's lives better.

4. What do you think is the most useful invention? Explain your choice.

Use the idea we above to write a summary about Inventions.

[illegible]

INDEPENDENT READING - 30 Minutes

- 1. Continue to read your independent reading book.
- 2. IF you do not have your Independent Reading book, select a book from your home library.
- 3. Log the title, author and number of pages on the Reading Log.

Reading Log

Name: _____ Parent Initials: _____

Date	Title of Book	Author	Pages	Time spent reading



CBSD FID WORKBOOK

GRADE 4



SPECIALS

DAY 3



ART - Grade 4

TIME

20 minutes



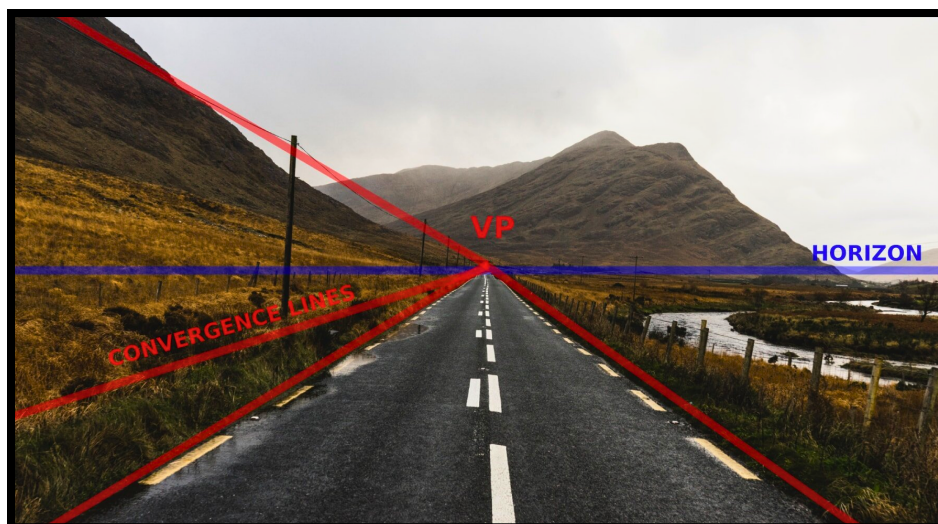
Learning Goal:
I will use one-point perspective to draw a house.

FID day
3

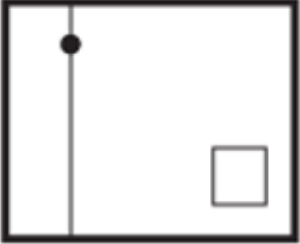
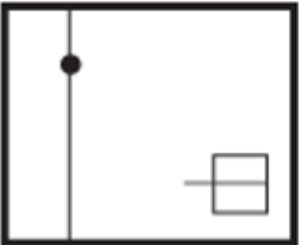
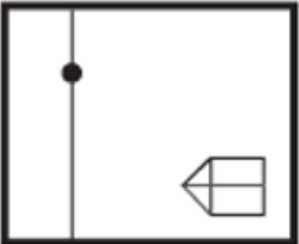
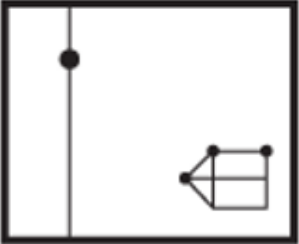
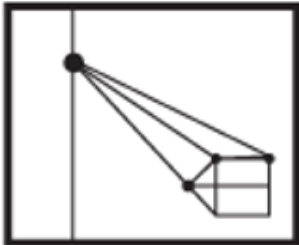
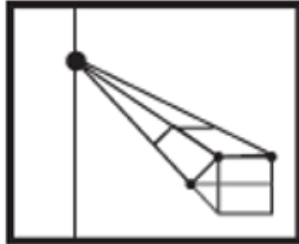
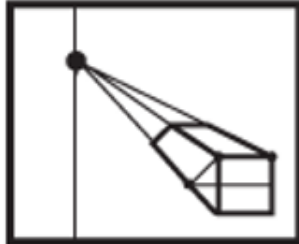
Materials

pencil, eraser and ruler (optional)

Linear perspective is a method of creating the illusion of **space** or **depth** on a flat surface. Artists can create this effect with **One-Point Perspective**. They make the **orthogonal lines** direct back to the **vanishing point** on the **horizon line**. Draw your landscape following the one-point perspective directions.



In the box to the right follow these 9 steps . Then add details and color .

			Horizon Line	Vanishing Point	Box
			Box Divided	Add Triangle (Roof)	Put In Dots
			Dot to Dot	Add Wall & Roof Lines	Outline Darkly & Erase Extra Lines

