



INSTITUTE OF
**READING
DEVELOPMENT**

Nonfiction

Program for Entering 6th Graders

Table of Contents

Lesson 1: Your Amazing Brain	1
Lesson 2: Active Reading in Textbooks	2
Lesson 3: Taking Notes in Textbooks	5
Lesson 4: Text Structures	7
Lesson 5: Trapped in the Ice!	8
Reading Speed Grids & Tracker	9

Your Amazing Brain

The human brain is an amazing organ. It acts as the command center for your entire body, and hidden inside it are all the things that make you *you*. As one of the most-studied organs in the human body, we know more about the brain today than ever before.

Interestingly, your brain's size changes throughout your life, but brain size doesn't have a lot to do with intelligence. The adult human brain weighs about three pounds, while a sperm whale's brain is a whopping twenty pounds. However, a sperm whale is definitely not smarter than you are. In fact, it may not even be as intelligent as a crow, whose brain is only the size of a marble.

No matter what size your brain is, it will never run out of storage space. It has billions of neurons, or nerve cells, that store information. They come together in connections called synapses that run at lightning speed. Together, all these neurons and synapses have a storage capacity of about 2.5 petabytes. That's the equivalent of 9000 laptops or one trillion pages of a book.

Did you know a doctor could perform brain surgery on you while you're awake and it wouldn't hurt a bit? This is because the human brain is incapable of feeling pain. There are pain receptors, called nociceptors, in almost every other part of your body, but not in the brain itself. When you get a headache, it's actually the blood vessels or membranes in your head that hurt, not your brain.

Active Reading in Textbooks

- **Before you read:** Preview the section:
 - Read the section overview & intro paragraph.
 - Figure out how the section is organized.
 - Ask yourself: What am I going to learn about?
- **While you read:** Track main ideas & supporting details.
- **After you read:** Review what you've read.

3 Roman Society and Culture

KEY QUESTIONS:

- What was daily life like in the Roman Empire?
- What kind of art, architecture, and engineering was the Roman Empire known for?

PEOPLE:

- Spartacus
- Tacitus
- Ovid

VOCABULARY:

- patriarchal
- polytheistic
- rotunda
- mosaic



Emperor Marcus Aurelius

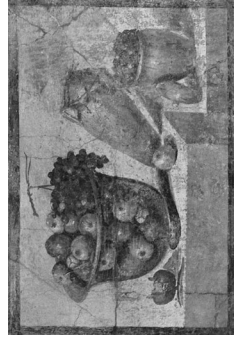
The Roman Empire brought together people of all different types, from wealthy landowners to poor slaves captured from other lands. Despite their differences, Roman subjects lived together in a society that valued law, order, and obedience to authority. People were sharply divided into social classes, and rising above one's class was difficult. Yet within this rigid social structure, arts and culture thrived. Roman architects, writers, and artists created works that still influence our world today.

LIFE IN THE ROMAN EMPIRE

A Roman's daily life depended very much on who he or she was. The poor and the rich lived differently. So did men and women, children and adults, and free and enslaved people. People of all social classes and backgrounds mingled in the busy city, living very different lives right next to one another.

Family Life

Like Roman society, Roman families were **patriarchal**, which means men were in charge. The husband and father was the head of the household and ruled over family life. His wife and children were supposed to obey him, and he was expected to treat all family members fairly. He owned the family's property and had rights that the rest of his family did not.



Pompeian mosaic, created around A.D. 70



Empress Vibia Sabina, wife of Emperor Hadrian, known for being strong and independent.

Roman women devoted themselves to the well-being of the household. They were in charge of raising the children and managing the house. For wealthy women, this came with a lot of responsibility. They managed the household's expenses and supervised the servants and slaves. Women could also advise their husbands in many matters. In fact, the wives of some important politicians had a lot of power and influence, even though they had no public role outside the home.

Slaves and Slavery

Slavery existed throughout the Roman Empire. Slaves built road and bridges and worked on farms and in households. Most slaves were people who had been captured by the Roman army during wars. Sometimes poor people sold themselves or their children into slavery to pay off a debt. Slaves had few legal rights and could be cruelly punished by their masters. Those who served wealthy households were slightly better off. They could learn skilled jobs such as weaving, painting, and even medicine. On the whole, though, slaves had few opportunities and received nothing in return for their work.

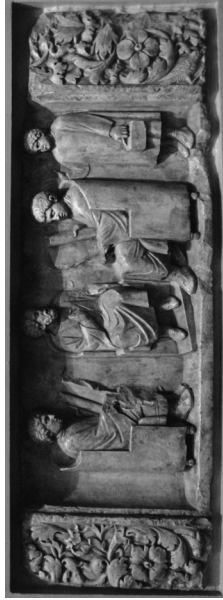
PEOPLE IN HISTORY

SPARTACUS, THE REBEL SLAVE

Every person in ancient Rome knew the name Spartacus. In 73 B.C., he led the most successful slave rebellion in Roman history. He and 77 of his fellow slaves stole weapons and escaped from their masters. Within a year, Spartacus had around 70,000 rebel slaves fighting with him. They fought bravely in many battles, but they couldn't hold out against the Roman army. When the Romans crushed the rebellion in 71 B.C., Spartacus and most of his followers chose to die rather than surrender.



Education Roman children were educated according to their social class. The children of poor people did not go to school. Instead, they learned by imitating their parents. Sons worked alongside their fathers to learn skills like farming or building. Daughters learned cooking, housework, and gardening from their mothers. In contrast, wealthy families hired tutors or sent their children to school. Both boys and girls learned to read, write, and do math. Often they learned the Greek language, too.



This bas-relief sculpture shows a teacher in ancient Rome as he instructs three discipuli, or students.

Religion Ancient Roman religion was **polytheistic**, meaning they worshipped many different gods and goddesses. For example, Roman soldiers might pray to Mars, the god of war, for success in battle. Young people hoping to marry might pray to Venus, the goddess of love and beauty. The gods of Roman mythology could be kind and helpful, but they could also be cruel and troublesome. To gain the favor of the gods, Romans made sacrifices of fruit, flowers, and livestock.



Statue of Diana

ROMAN GODS	
Jupiter	King of the Gods, God of the Sky
Mars	God of War
Neptune	God of the Sea
Apollo	God of the Sun

ROMAN GODDESSES	
Juno	Queen of the Gods, Goddess of Marriage
Venus	Goddess of Beauty
Athena	Goddess of Wisdom
Diana	Goddess of the Hunt

Ancient Romans practiced their religion at home and in public. Their homes had private altars that might include images of one or more of the gods. Cities in ancient Rome also had large, beautiful temples dedicated to the gods. Romans visited them to pray, to seek help from a priest or priestess, or to make sacrifices. Temples to Vesta, goddess of the home, were among the most important. Women were in charge of keeping a fire lit in Vesta's temples at all times.

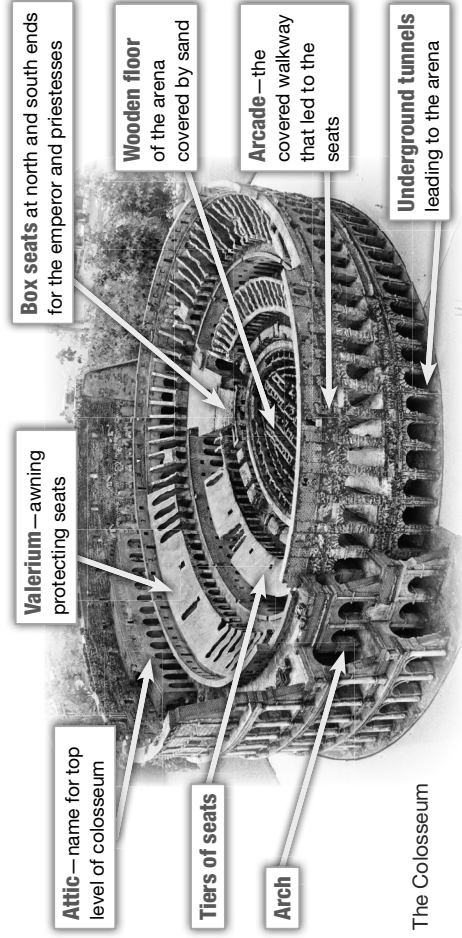


Romans had small altars at home dedicated to gods and goddesses.

ARCHITECTURE, ENGINEERING, AND THE ARTS

The Romans made many advances in architecture, engineering, and medicine. In fact, many of their innovations have persisted into modern times.

Architecture and Engineering The Romans were master builders and engineers. Some of their roads and bridges remain in use today. Roman architectural innovations include the stone arch and the round, vaulted dome called a **rotunda**. Important public buildings were intended to create the maximum impact on the viewer and often incorporated archways, domes, and columned porches. Many surviving Roman structures have been preserved as historic sites, among them the Colosseum in Rome, the Tower of Hercules in Spain, and Hadrian's Wall in Britain.



The Colosseum

Taking Notes in Textbooks

- Write and underline each heading.
- Write down the main idea & supporting details for each paragraph.
- Keep your notes short and easy to read.

Roman Society and Culture

- Roman Empire brought dif. kinds of people together.
 - Society valued law, order, obedience to Authority.
 - Sharply divided into social classes; rising above class was difficult.

Life in the Roman Empire

- Daily life depended on who you were.
 - Rich/Poor, Men/Women, Free/slave all lived differently.

Family life

- Roman families patriarchal = men in charge
 - Father was head of household, ruled over wife, children.
 - He owned property, had rights others didn't.
- Women in charge of children & household.
 - Resp. for managing expenses, supervising servants, slaves.
 - Some women also advised husbands, had a lot of power & influence even though no public role.

Slaves & Slavery

- Slavery existed throughout Rom. Emp.
 - Most slaves were people captured by army during war.
 - Some poor people sold self/children into slavery to pay debt.
 - Slaves had few legal rights, could be treated cruelly.
 - Slaves in wealthy households better off; could learn skilled jobs.

What's wrong with these notes?

Roman Society + Culture

- R.E. had diff. people
- Law, order + obed.
- Soc. classes

Life in the Roman Empire

- Daily life varied
- Rich, poor, men, women, free, slave

Family Life

- R. family = patr.
- Fath. = head
- Owned prop., had rights
- Women = children, household
- Resp. for exp., supervising
- Some had power, no pub. role

Slaves + Slavery

- Existed throughout R.E.
- Most capt. by army
- Some sold children
- Few legal rights, treated cruelly
- Wealthy household = better jobs

Text Structures

A **text structure** is how an author organizes information. For example:

- Description
- Problem-Solution
- Comparison

Common Signal Words

like	the trouble	for example
similar	challenge	types
both	solution	main parts
different	answer	such as
in contrast	in response	characteristics
however		

Paragraph 1:

Tuberculosis is a serious disease, but detecting when someone has it is a challenge. Lab tests take a long time and are also expensive. The solution is surprising. Scientists figured out how to train dogs to find the disease by sniffing people. If one of these dogs smells tuberculosis, he'll sit down and bark. Then the person can get treatment.

Paragraph 2:

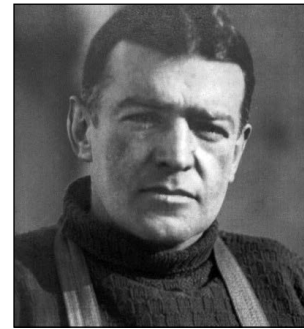
Dogs and wolves belong to the same species, but there are important differences between them. Both dogs and wolves are social animals. However, wolves prefer being with other wolves, while dogs seek out humans for companionship. Wolf pups play so they can learn to hunt. Dogs, by contrast, play primarily for fun. Wolves also mature more quickly than dogs. This helps them survive in the wild.

Paragraph 3:

Of all the dog breeds, the Xolo (*show-low*) has some of the most unusual characteristics. For example, the Xolo is almost completely hairless. It has just a few short hairs on its head, feet, and tail. It's also one of the oldest dog breeds and has been around for more than 3,000 years. Its full name – Xoloitzcuintli – comes from the name of an Aztec god.

Trapped in the Ice!

Imagine being trapped for years in the coldest place on Earth. That's what happened to the explorer Ernest Shackleton. In 1914, Shackleton set sail for Antarctica. He wanted to be the first to trek across the continent. In January of 1915, the ocean froze around his ship, the *Endurance*. He and his crew were stranded. It took almost two and a half years for them to get rescued!



Ernest Shackleton



The *Endurance* crushed by ice.

The ship drifted until the ice crushed it. In November 1915, Shackleton and his men decided to hike across the frozen sea. They carried supplies and even a lifeboat through sub-zero temperatures. The winds got up to 100 miles per hour. They finally reached Elephant Island in the spring of 1916. This was the first time they were on land in almost 500 days!

Next, Shackleton made a difficult decision—he set sail on the lifeboat with five of his men. He didn't want to leave the others behind. However, he knew they wouldn't be rescued if they all stayed put. The men in the tiny lifeboat faced bitter cold and fifty-foot waves.

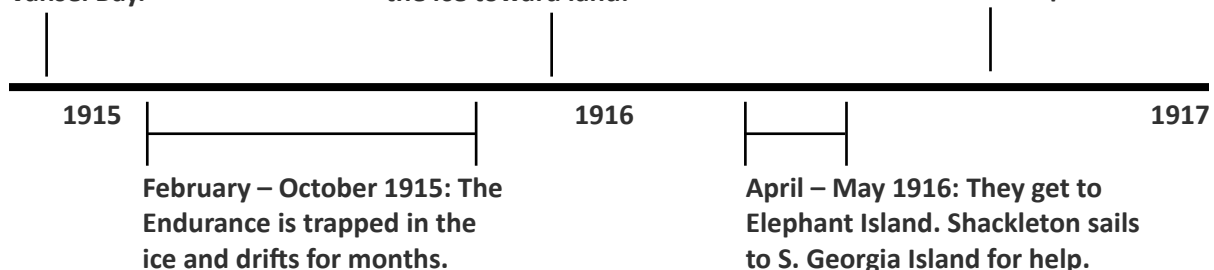
Amazingly, they reached South Georgia Island after two weeks. There they hiked 22 miles over snowy mountains to get to a whaling station.

After he reached safety, Shackleton borrowed a ship and set off to rescue the rest of his crew. He just couldn't abandon the men he left behind. It took several tries to get through the ice. He finally reached Elephant Island at the end of August 1916. Thanks to Shackleton's determination, all 28 crew members survived!

December 1914: The *Endurance* sets sail for Vahsel Bay.

November 1915: The *Endurance* is crushed. The crew walks across the ice toward land.

August 1916: Shackleton sails back and rescues his crew from Elephant Island.



Reading Speed Grids

The Doughnut Fix: 10.5 words per line

# of lines	Reading Speed
1	10.5
2	21
3	32
4	42
5	53
6	63
7	74
8	84
9	95
10	105
11	116
12	126
13	137
14	147
15	158

# of lines	Reading Speed
16	168
17	179
18	189
19	200
20	210
21	221
22	231
23	242
24	252
25	263
26	273
27	284
28	294
29	305
30	315

# of lines	Reading Speed
31	326
32	336
33	347
34	357
35	368
36	378
37	389
38	399
39	410
40	420
41	431
42	441
43	452
44	462
45	473

# of lines	Reading Speed
46	483
47	494
48	504
49	515
50	525
51	536
52	546
53	557
54	567
55	578
56	588
57	599
58	609
59	620
60	630

Fame and Glory in Freedom, Georgia: 9.5 words per line

# of lines	Reading Speed
1	9.5
2	19
3	29
4	38
5	48
6	57
7	67
8	76
9	86
10	95
11	105
12	114
13	124
14	133
15	143

# of lines	Reading Speed
16	152
17	162
18	171
19	181
20	190
21	200
22	209
23	219
24	228
25	238
26	247
27	257
28	266
29	276
30	285

# of lines	Reading Speed
31	295
32	304
33	314
34	323
35	333
36	342
37	352
38	361
39	371
40	380
41	390
42	399
43	409
44	418
45	428

# of lines	Reading Speed
46	437
47	447
48	456
49	467
50	475
51	485
52	494
53	504
54	513
55	523
56	532
57	542
58	551
59	561
60	570

Reading Speed Tracker

Words Per Minute

550

500

450

400

350

300

250

200

150

100

50

Speed:

Date:

Title:

Conducting a Timing in a Non-Class Book

1. First figure out how many words per line your book has. Choose a full line of text (not a short or indented line). Count all the letters, punctuation marks, and spaces in that line, divide by 6, and round to the nearest whole number. That is the average words per line for your book.
2. In your book, mark where you'll begin reading and read for exactly one minute.
3. Count the number of lines you read during the minute. Multiply the number of lines by the number of words per line from Step 1. This is your reading speed. For example, if you read 16 lines in a book that has 11 words per line, your reading speed would be 16×11 , or 176 words per minute.

