Name: _____ Date: _____

When Every Town Had Its Own Noon

Circle group

Long ago, a country did not have one time. Each town set its clocks by the sun. When the sun was at its highest spot, it was noon. The sun gets to that spot later as you go west. So a town in the west had noon a few minutes after a town in the east.

That was fine for people on foot or on horses. Then came trains. A train line passed through many towns. Each town had a different time. It was hard to write a train schedule. Trains could be late.

In 1883, the railroads fixed it. They split the country into time zones. Everyone in one zone used the same time. Towns soon did the same, because it was easier.

Today the world uses time zones. Each zone is about one hour from the next. A phone can change the time for you.

Questions

1. How did towns long ago pick the time for noon?

_____

_____

2. Why was noon later in a town to the west?

_____

_____

3. What was hard for the train lines?

_____

_____

4. What did the railroads do in 1883?

_____

_____

5. About how far apart in time is one zone from the next?

_____

_____

6. Why did towns copy the railroads?

_____

_____

Words to know

noon: twelve o'clock in the middle of the day
schedule: a list of the times when things will happen
zones: areas set apart from other areas for a certain purpose

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

When Every Town Had Its Own Noon

Triangle group

Long ago, a whole country did not share one time. Each town set its clocks by the sun. When the sun climbed to its highest spot in the sky, the town called it noon. The sun reaches that spot a little later as you travel west. So a town to the west had its noon a few minutes after the noon of a town to the east.

This worked well when people walked or rode horses. Trains changed everything. One railroad line could pass through dozens of towns, and every town told time in its own way. Imagine trying to write a train schedule when each station has a different clock. Trains could arrive late, and workers could be unsure which train had the right to use a track.

In 1883, the railroads in the United States found an answer. They divided the country into time zones. Everyone inside one zone used the same time, even if the sun was a few minutes off. Towns soon copied the railroads because shared time made life simpler.

Today the whole world uses time zones. As you travel from one zone to the next, the clock changes by about one hour. A phone can change the time for you, but the idea behind it is a math plan that lets millions of people agree.

Questions

1. How did towns long ago decide when it was noon?

_____

_____

2. Why did a town in the west have noon a few minutes after a town in the east?

_____

_____

3. What problem did trains bring to towns with different clocks?

_____

_____

4. What did the railroads do in 1883?

_____

_____

5. About how much does the clock change from one time zone to the next?

_____

_____

6. Why do you think towns began to copy the railroads?

_____

_____

Words to know

noon: twelve o'clock in the middle of the day
schedule: a list of the times when things will happen
station: a place where trains stop for people to get on and off
zones: areas set apart from other areas for a certain purpose

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

When Every Town Had Its Own Noon

Square group

Long ago, a whole country did not follow a single time. Every town set its clocks by the sun, and noon was the moment the sun climbed to its highest point in the sky. Because the sun reaches that point slightly later as you travel westward, a western town celebrated its noon a few minutes after an eastern town did.

For people who walked or rode horses, this difference hardly mattered. Trains, however, changed everything. A single railroad line could pass through dozens of towns, and each one kept its own local time. Writing a reliable train schedule became nearly impossible, trains arrived late, and workers could not always be sure which train had the right to use a track.

In 1883, the railroads in the United States came up with a solution. They divided the country into time zones, and everyone inside a zone agreed to use the same time, even when the sun was a few minutes off. Towns soon followed the railroads' example, because shared time made daily life far simpler and more predictable.

Today the entire world relies on time zones. When you travel from one zone to the next, the clock changes by about one hour. Your phone may adjust itself automatically, but behind that convenience is a careful math plan that allows millions of people to agree.

Questions

1. How did towns long ago decide when it was noon?

_____

_____

2. Why did a western town have its noon a few minutes after an eastern town?

_____

_____

3. What trouble did trains cause for towns that kept their own local time?

_____

_____

4. What solution did the railroads come up with in 1883?

_____

_____

5. About how much does the clock change as you move to the next time zone?

_____

_____

6. Why do you think towns followed the railroads' example?

_____

_____

Words to know

noon: twelve o'clock in the middle of the day
schedule: a list of the times when things will happen
zones: areas set apart from other areas for a certain purpose

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: When Every Town Had Its Own Noon

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: When Every Town Had Its Own Noon

Easier · 146 words · Flesch-Kincaid grade 1.2

1. They set their clocks by the sun at its highest spot.
2. The sun gets to its highest spot later as you go west.
3. It was hard to write a schedule, and trains could be late.
4. They split the country into time zones.
5. About one hour.
6. Using the same time was easier for everyone.

Triangle: When Every Town Had Its Own Noon

This passage · 220 words · Flesch-Kincaid grade 4.4

1. They set their clocks by the sun when it was highest in the sky.
2. The sun reaches its highest spot a little later as you go west.
3. Schedules were hard to write, and trains could be late or mixed up.
4. They divided the country into time zones.
5. About one hour.
6. Shared time made life simpler, and it kept everyone's plans in agreement.

Square: When Every Town Had Its Own Noon

Harder · 222 words · Flesch-Kincaid grade 8.2

1. They set their clocks by the sun at the moment it climbed to its highest point.
2. The sun reaches its highest point slightly later as you travel west.
3. Train schedules were nearly impossible to write, and trains could be late or mixed up.
4. They divided the country into time zones.
5. About one hour.
6. Shared time made daily life simpler and more predictable.