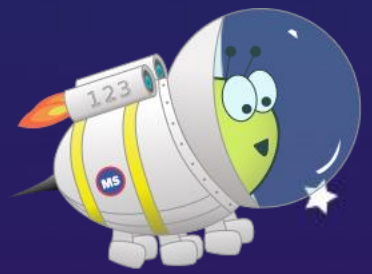
MathShed

Year 5/6

Home Learning

Lesson 4: To be able to read and interpret tables



Term: Autumn **Unit:** Block 3 – Statistics **Lesson:** 4

To be able to read and interpret tables

Success criteria:

- ✓ I can read tables to extract information, answer and write questions, applying my addition and subtraction skills to solve sum and difference problems
- ✓ I can explain my reasoning when reading tables to extract information, answer and write questions, applying my addition and subtraction skills to solve sum and difference problems

To be able to read and interpret tables

Starter:

Which city is the odd one out?

city	Aberdeen	Canberra	Chicago	Manchester	Wellington
population	208,000	396,000	2,716,000	510,000	213,000

Explain your answer.

To be able to read and interpret tables

Starter:

Which city is the odd one out?

city	Aberdeen	Canberra	Chicago	Manchester	Wellington
population	208,000	396,000	2,716,000	510,000	213,000

Chicago is the odd one out as it is the only city with a population size greater than 1,000,000.

To be able to read and interpret tables

Talking Time:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
Jupiter	139,820	4,330 days	9 h 50 m
Mars	6,779	686 days	24 h 45 m
Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Which planets take less than a day to complete a rotation on their axes?

To be able to read and interpret tables

Talking Time:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
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Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Neptune, Uranus, Saturn and Jupiter take less than a day to complete a rotation on their axes.

To be able to read and interpret tables

Talking Time:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
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Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Which planets take less than a year to complete a revolution around the sun?

To be able to read and interpret tables

Talking Time:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
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Mars	6,779	686 days	24 h 45 m
Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Venus and Mercury take less than a year to complete a revolution around the sun.

To be able to read and interpret tables

Talking Time:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
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Mars	6,779	686 days	24 h 45 m
Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Write the number of days it takes Uranus to make a full revolution in words.

To be able to read and interpret tables

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planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
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Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

It takes Uranus thirty thousand, six hundred and eighty-five days to make a full revolution.

To be able to read and interpret tables

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Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
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Mars	6,779	686 days	24 h 45 m
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Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

What is the difference in time it takes between Earth and Venus to make a rotation?

To be able to read and interpret tables

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planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
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What is the difference in time it takes between Earth and Venus to make a rotation?

243 – 1 = 242 days

To be able to read and interpret tables

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Venus	12,104	225 days	243 days
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What is the difference in time it takes between Venus and Mercury to make a revolution?

To be able to read and interpret tables

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Neptune	49,244	60,190 days	16 h
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Mercury	4,879	88 days	59 days

What is the difference in time it takes between Venus and Mercury to make a revolution? 225 – 88 = 137 days

To be able to read and interpret tables

Talking Time:

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Neptune	49,244	60,190 days	16 h
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Mercury	4,879	88 days	59 days

What is the difference in diameter between Earth and Mars?

To be able to read and interpret tables

Talking Time:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
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Mars	6,779	686 days	24 h 45 m
Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

What is the difference in diameter between Earth and Mars?

12, 742 – 6,779 = 5,963 km

To be able to read and interpret tables

Activity 1:

Planets Information Table:

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
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To be able to read and interpret tables

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Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Activity 1:

Use the table to answer the following:

a) Which planets have diameters greater than 50,000 km?

b) Which planets take more than a year to make a revolution around the sun?

c) Write the amount of days it takes Neptune to revolve around the sun in words.

d) Write the diameter of Neptune in words.

e) What is the difference in diameter between Uranus and Neptune?

f) What is the difference between the total time for rotation between Mars and Saturn?

To be able to read and interpret tables

planet	diameter (km)	revolution	rotation
Neptune	49,244	60,190 days	16 h
Uranus	50,724	30,685 days	17 h 17 m
Saturn	116,460	10,760 days	10 h 48 m
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Mars	6,779	686 days	24 h 45 m
Earth	12,742	365 days	24 h
Venus	12,104	225 days	243 days
Mercury	4,879	88 days	59 days

Activity 1:

Use the table to answer the following:

a) Uranus, Saturn and Jupiter have diameters greater than 50,000 km.

b) Mars, Jupiter, Saturn, Uranus and Neptune take more than a year to make a revolution around the sun.

c) It takes Neptune sixty thousand, one hundred and ninety days to revolve around the sun.

d) The diameter of Neptune is forty-nine thousand, two hundred and forty-four km.

e) 50,724 – 49,244 = 1,480 km

f) 24 h 45 m – 10 h 48 m = 13 h 57 m

To be able to read and interpret tables

Talking Time:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

Which city has the highest population listed?

To be able to read and interpret tables

Talking Time:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

Which city has the highest population listed?

Detroit has the highest population, 674,000.

To be able to read and interpret tables

Talking Time:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

Which is the difference between the highest and second-highest population?

To be able to read and interpret tables

Talking Time:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

Which is the difference between the highest and second-highest population?

674,000 – 510,000 = 164,000

To be able to read and interpret tables

Talking Time:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

How much greater is the population of Canberra than the population of Wellington?

To be able to read and interpret tables

Talking Time:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

How much greater is the population of Canberra than the population of Wellington?

396,000 - 213,000 = 183,000

To be able to read and interpret tables

Activity 2: Use the table below to answer the following:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

a) Which is the difference between the highest and lowest population?

b) Which two cities combine to make a population of 421,000?

c) How much greater is the population of Manchester than Aberdeen?

d) Which two cities' populations can you combine to make a population size greater than a million? Can you think of more than one possibility?

To be able to read and interpret tables

Activity 2: Use the table below to answer the following:

city	Aberdeen	Canberra	Detroit	Manchester	Wellington
population	208,000	396,000	674,000	510,000	213,000

a) 674,000 - 208,000 = 466,000

b) Aberdeen and Wellington combine to make 421,000 (203,000 + 218,000).

c) 510,000 - 208,000 = 302,000

d) Detroit and Manchester combine to make a population size of 1,184,000 and Detroit and Canberra combine to make a population size of 1,070,000.

To be able to read and interpret tables

Activity 3:

Stadia Information Table:

stadium	city	country	capacity
1st of May	Pyongyang	North Korea	114,000
Michigan	Ann Arbor	USA (MI)	107,601
Beaver	State College	USA (PA)	106,572
Kyle Field	College Station	USA (TX)	102,733
Neyland	Knoxville	USA (TN)	102,455
Tiger	Baton Rouge	USA (LA)	102,321
Ohio	Columbus	USA (OH)	102,082
Bryant-Denny	Tuscaloosa	USA (AL)	101,821
Texas Memorial	Austin	USA (TX)	100,119
Melbourne	Melbourne	Australia	100,024

To be able to read and interpret tables

Activity 3:

Are the following true or false?

a) The largest stadium in the world is in the USA.

b) The second-largest stadium has a capacity of 106,572.

c) 9 out of the 10 largest stadiums in the world are in the USA.

stadium	city	country	capacity
1st of May	Pyongyang	North Korea	114,000
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Bryant-Denny	Tuscaloosa	USA (AL)	101,821
Texas Memorial	Austin	USA (TX)	100,119
Melbourne	Melbourne	Australia	100,024

d) All of the top 10 largest stadiums have a capacity greater than 100,000.

e) All of the top 10 largest stadiums have an even-numbered capacity.

f) The total capacity of all 10 of the world's largest stadiums combined totals more than 1,000,000.

To be able to read and interpret tables

Activity 3:

Are the following true or false?

a) The largest stadium in the world is in the USA. (F)

b) The second-largest stadium has a capacity of 106,572. (F)

c) 9 out of the 10 largest stadiums in the world are in the USA. (F)

stadium	city	country	capacity
1st of May	Pyongyang	North Korea	114,000
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Texas Memorial	Austin	USA (TX)	100,119
Melbourne	Melbourne	Australia	100,024

d) All of the top 10 largest stadiums have a capacity greater than 100,000. (T)

e) All of the top 10 largest stadiums have an even-numbered capacity. (F)

f) The total capacity of all 10 of the world's largest stadiums combined totals more than 1,000,000. (T)

To be able to read and interpret tables

Evaluation:

competitor	100 m dash	pollen throw	comb toss
Poppy	12.3 s	23 cm	12 cm
Petal	13.2 s	32 cm	14 cm
Daisy	14.5 s	41 cm	15 cm
Astrobee	16.8 s	22 cm	11 cm
Buzz	15.4 s	33 cm	18 cm
Honey	11.9 s	42 cm	17 cm

Do you agree with Astrobee?

Explain your answer.

To be able to read and interpret tables

Evaluation:

competitor	100 m dash	pollen throw	comb toss
Poppy	12.3 s	23 cm	12 cm
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Honey	11.9 s	42 cm	17 cm

In races, the person who takes the least amount of time to finish wins. As Astrobee has taken the most seconds to complete the race, it is in fact a loss. The winner of the race was Honey with a time of 11.9 seconds – less than any other bee!

To be able to read and interpret tables

Success criteria:

- ✓ I can read tables to extract information, answer and write questions, applying my addition and subtraction skills to solve sum and difference problems
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