Lesson 3- Secondary data

Chemistry- Key Stage 3

Energetics

Which table titles would be best? Why?

A

Time (minutes)	Amount of gas (cm^3)

B

Time, every 20 seconds up to 2 minutes	Volume of gas produced by the reaction

C

Volume of gas (cm^3)	Time (s)

D

Time (s)	Volume of gas (cm^3)

Can you identify anomalies in these?

Sequence 1

8, 105, 23, 20, 10

Sequence 2

33, 39, 42, 77, 30

Sequence 3

22, 132, 142, 137, 300

Can you calculate means in these?

Sequence 1

18, 19, 21, 22

Sequence 2

55, 59, 2, 64, 62, 60

Can you round these numbers?

a) To a whole number

73.4

b) To 1 decimal place

73.42

c) To 2 decimal places

73.475

d) To 3 decimal places

73.4759

Calculate the mean of these number sequences?

A

33.66, 32.45, 78.99

B

3.11, 2.34, 15.33, 3.23

Identify anomalies, calculate mean, round the number

Time (s)	Volume of gas produced (cm^3)			
	Test 1	Test 2	Test 3	Mean
20	10	9	12	
40	23	27	46	
60	43	41	39	
80	55	59	58	
100	88	78	74	

Answers

Which table titles would be best? Why?

A

Time (minutes)	Amount of gas (cm^3)

B

Time, every 20 seconds up to 2 minutes	Volume of gas produced by the reaction

C

Volume of gas (cm^3)	Time (s)

D

Time (s)	Volume of gas (cm^3)

Can you identify anomalies in these?

Sequence 1

8, 105, 23, 20, 10

Sequence 2

33, 39, 42, 77, 30

Sequence 3

22, 132, 142, 137, 300

Can you calculate means in these?

Sequence 1

18, 19, 21, 22

20

Sequence 2

55, 59, 2, 64, 62, 60

60

Can you round these numbers?

a) To a whole number

73.4   **73**

b) To 1 decimal place

73.42   **73.4**

c) To 2 decimal places

73.475   **73.48**

d) To 3 decimal places

73.4759   **73.476**

Calculate the mean of these number sequences?

A	B
33.66, 32.45, 78.99	3.11, 2.34, 15.33, 3.23
33.06	**2.89**

Identify anomalies, calculate mean, round the number

Time (s)	Volume of gas produced (cm^3)			
	Test 1	Test 2	Test 3	Mean
20	10.5	9.5	12.5	32.5/3= 10.8
40	23.22	27.88	~~46.20~~	51.1/2= 25.55
60	43	42	39	124/3= 41
80	55.555	~~99~~	59.544	115.099/2= 57.550
100	~~108~~	78	74	152/2= 76