


DISSOLVED OXYGEN

Find the mean, or average, of your results.
Unit of measurement: mg/L

<p>Do your three tests finding dissolved oxygen (mg/L).</p> 	<p>Take your three results</p> <p>Example</p> <p>9.1 , 8.9 , 8.7</p> <p>and find the mean.</p>
<p>To find the mean, first add up the three results.</p> <p>Example</p> $9.1 + 8.9 + 8.7 = 26.7$	<p>Then, divide the total by 3 (the number of tests you completed).</p> <p>Example</p> $26.7 \div 3 = 8.9$
<p>8.9 would be your mean, or average.</p>	<p>Formula:</p> $\frac{\text{Test \#1}}{\text{Total}} + \frac{\text{Test \#2}}{\text{Total}} + \frac{\text{Test \#3}}{\text{Total}} = \frac{\text{Total}}{\text{Total}}$ $\frac{\text{Total}}{\text{Total}} \div 3 = \frac{\text{Mean}}{\text{Mean}}$

Practice: find the mean

1. 9, 7.5, 8.2

$$9 + 7.5 + 8.2 = 24.7$$

$$24.7 \div 3 = \underline{\quad}$$

2. 6.7, 7.8, 6.9

3. 9.1, 8.7, 9.0

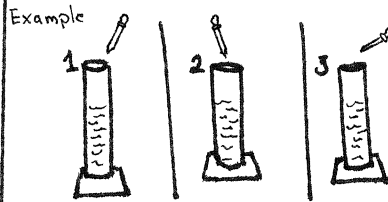
TURBIDITY

Calculate Jackson Turbidity Units, or JTU.
Unit of measurement: JTU

Fill each dropper to the 0.5 mL line.



Count the number of times you filled the dropper to the line and emptied it into the beaker.



Multiply the number of droppers by 5.

Example

$$3 \text{ droppers} \times 5 = 15$$

15 JTU

is your answer

Formula:

$$\frac{\text{\# of droppers}}{\text{\# of droppers}} \times 5 = \frac{\text{JTU}}{\text{JTU}}$$

Practice: Find JTU

1. 5 droppers

2. 2 droppers

3. 4 droppers

FECAL COLIFORM

Find the highest number.

Unit of measurement: FC/100mL

<p>Look at your three results</p> <p>Example</p> <p>42 47 85</p>	<p>Which number is the highest?</p> <p>Example</p> <p>85</p>
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Practice: find the highest number

1. 58 , 47, 56

2. 69, 71, 73

3. 80, 80, 61

NITRATES

Find the mean, or average.
Unit of measurement: mg/L

Add up your three results.

Example

$$0.9 + 0.7 + 0.9 = 2.5$$

Divide your total by 3
(or the number of tests you
completed.)

Example

$$2.5 \div 3 = 0.8\bar{3}$$

$0.8\bar{3}$ is your
mean or average.

Formula:

$$\frac{\text{Test \#1}}{\quad} + \frac{\text{Test \#2}}{\quad} + \frac{\text{Test \#3}}{\quad} = \frac{\text{Total}}{\quad}$$

$$\frac{\text{Total}}{\quad} \div 3 = \frac{\text{Mean}}{\quad}$$

Practice: Find the mean

1. $0.8, 0.5, 0.7$

2. $0.1, 0.2, 0.3$

3. $0.8, 0.8, 0.75$

pH

Find the mode, or most common number.
Unit of measurement: pH units

<p>Record your three results.</p> <p>Example</p> <p>$\frac{6}{\text{Test \#1}}$ $\frac{6}{\text{Test \#2}}$ $\frac{6.5}{\text{Test \#3}}$</p>	<p>Which is the most common number?</p> <p>Example</p> <p><u>6</u></p>
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Practice: find the mode

1. 6, 7, 7

2. 5, 7, 5

3. 6, 8, 8

ANSWER KEY

Dissolved Oxygen

1. 8.1 mg/L
2. 7.1 mg/L
3. 8.9 mg/L

Turbidity

1. 25 JTU
2. 10 JTU
3. 20 JTU

Fecal Coliform

1. 58 FC/100 mL
2. 73 FC/100 mL
3. 80 FC/100 mL

Nitrates

1. 0.6 mg/L
2. 0.2 mg/L
3. 0.8 mg/L

pH

1. 7 pH units
2. 5 pH units
3. 8 pH units