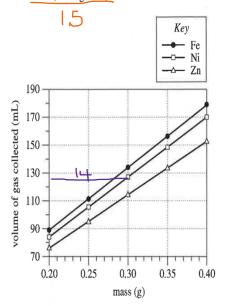
### Day 13 – Science

### Experiment 1

In each trial, a selected mass of Fe, Ni, or Zn was tested at  $30^{\circ}\text{C}$  (see Figure 1).



Experiment 2

In each trial, 0.30 g of Fe, Ni, or Zn was tested at a selected temperature (see Figure 2).

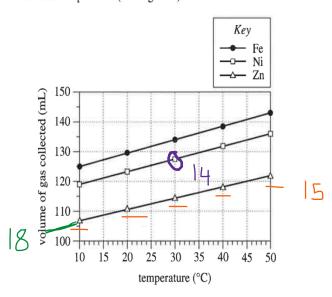


Figure 2

Figure 1

# 14. H . .

#### 15. B

Experiment 1 was tested at 30 degrees Celcius. Experiment 2 was tested at 10, 20, 30, 40 and 50.

#### 16. J

Both experiments test 3 metals, so F and G are wrong.

#### 17. A

Mass changes in experiment 1. Temp changes in experiment 2. Volume of gas collected changes in both experiments.

# 18. H

In experiment 2, volume decreases with temperature.

## 19. ..A

 $M + 2HCl \rightarrow MCl_2 + H_2$ 

For every 2 moles of HCl consumed in the experiment, 1 mole of  $H_2$  will be produced. Therefore 10 moles HCl = 5 moles  $H_2$ .

#### 20. J