

6th period data

	1 - aluminum	2 aluminum	3 aluminum	1 iron
mass	10.04 g	69.33 g		
volume				
metal	4.0 ml	28.75 ml		
mass	21.07g	17.96g		
1st vol	58ml	67ml		
2nd vol	67ml	73ml		
volume				
metal	9ml	12ml		
mass	69.4g		69.40g	49.63g
1st vol	50.10ml		64mL	57mL
2nd vol	74.20ml		89mL	63mL
volume				
metal		24.1	25mL	6mL
mass	69.31g	50.79g	21.04g	
1st vol	55mL	58.5mL	50mL	
2nd vol	75mL	65.2mL	58.1mL	
volume				
metal		24	6.7	8.1

7th period data

	1 iron	2 iron
mass	49.25	208.62
volume		
metal	6.2	26

	3 iron	4 iron	5 iron
mass	148.39	98.72	308.66
volume			
metal	18.9	12.6	39

Equipment: graduated cylinders, water, electronic scale or balance, pieces of aluminum and iron

	1	2	3	1	2	3
Mass	69.36	5.19	40.00	10.33		
WV 1	29.3	59	30.00	20.5		
WV 2	53.5	66	54	50.3		
Metal V	24.5	7	46	7.8		

Eldah 91

	Aluminum			Iron		
	1	2	3	1	2	3
Mass (Dry)	69.21g	55.81	98.1			
Water Volume 1	70	80	46			
Water Volume 2	94	100	77			
Metal Volume	24	20	31			

	1	2	3	1	2	3
Mass (Dry)	17.9g	54.28g	69.22g	28.16g		
Water Volume 1	60 mL	45 mL	70 mL	60 mL		
Water Volume 2	66.5 mL	64.5 mL	95 mL	71 mL		
Metal Volume	6.5 mL	19.5 mL	25 mL	11 mL		

3.5

	Aluminum			Iron		
	1	2	3	1	2	3
mass (dry)	18.74	87.19	156.67			
water before	46.9	55.0	167.8			
water after	53.4	63.6	221.9			
object volume	6.5	8.6	59.1			

... what is the mathematical relationship between mass and volume?

For iron, what is the mathematical relationship between mass and volume?

Equipment: graduated cylinders, water, electronic scale or balance, pieces of aluminum and iron

Aluminum

Iron

	Aluminum			Iron		
	1	2	3	1	2	3
mass	17.99	20.73	69.4g	100.06g	191.85g	4.44g
water (dry)	78	54	87ml	38ml	615ml	42ml
water volume	84	61.5ml	52ml	45.5g	639ml	41ml
metal volume	6cm ³	7.5cm ³	25cm ³	12.5cm ³	24cm ³	1cm ³