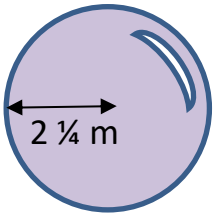
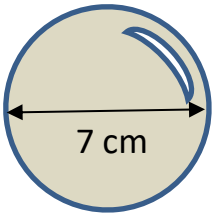
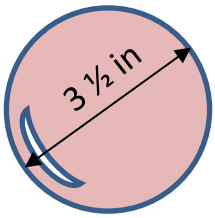
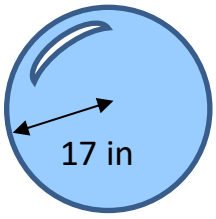
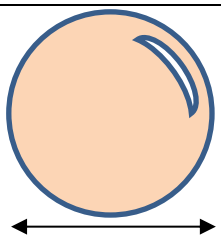
Name Date

SURFACE AREA OF A SPHERE SHEET 2

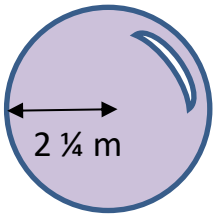
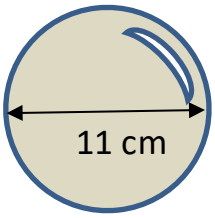
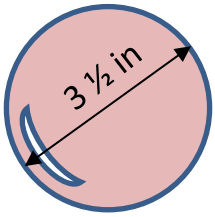
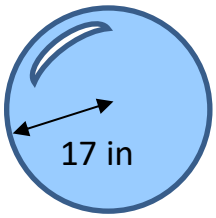
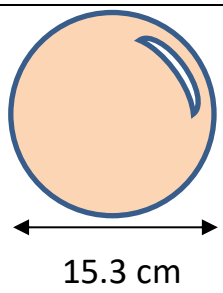
Use the radius or diameter measurements to find the area of these spheres. Give your answers to 1 decimal place.

SPHERE	WORKING OUT	AREA
1) 		
2) 		
3) 		
4) 		
5) 		

Name Date

SURFACE AREA OF A SPHERE SHEET 2 ANSWERS

Use the radius or diameter measurements to find the area of these spheres. Give your answers to 1 decimal place.

SPHERE	WORKING OUT	AREA
1) 	Surface area of a sphere = $4\pi r^2$ = 4 x π x (2 ¼)^2 = 4 x π x (81/16) = (81/4) π = 63.6 m^2 to 1 decimal place	63.6 m^2
2) 	The diameter of the sphere is 11 cm, so the radius = 11 ÷ 2 = 5 ½ cm Surface area of a sphere = $4\pi r^2$ = 4 x π x (3 ½)^2 = 4 x π x (121/4) = 121 π = 380.1 cm^2 to 1 decimal place	380.1 cm^2
3) 	The diameter of the sphere is 3 ½ in, so the radius = 3 ½ ÷ 2 = 1 ¾ in Surface area of a sphere = $4\pi r^2$ = 4 x π x (1 ¾)^2 = 4 x π x (49/16) = (49/4) π = 38.5 in^2 to 1 decimal place	38.5 in^2
4) 	Surface area of a sphere = $4\pi r^2$ = 4 x π x (17)^2 = 4 x π x (289) = 1156 π = 3631.7 in^2 to 1 decimal place	3631.7 in^2
5) 	The diameter of the sphere is 15.3 cm, so the radius = 15.3 ÷ 2 = 7.65 cm Surface area of a sphere = $4\pi r^2$ = 4 x π x (7.65)^2 = 4 x π x (58.5225) = 234.09 π = 735.4 cm^2 to 1 decimal place	735.4 cm^2