6.1 –D- Spheres

• Formulas:

	A_L (Lateral Area)	$A_T = A_L + A_b$ (Only hemispheres have a base)
Spheres	$4\pi r^2$	
Hemispheres	$2\pi r^2$	$3\pi r^2$

1

$A_L = A_T$ Sphere (Lateral Area)	$A_T = A_L + A_b$ (only hemispheres have a base)
$4\pi r^2$	$2\pi r^2 + \pi r^2$

Ex 1: A Tennis ball has diameter 6 cm. What is its surface area?

6 cm

2

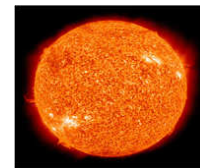| $A_L = A_T$ Sphere (Lateral Area)	$A_T = A_L + A_b$ (only hemispheres have a base)
$4\pi r^2$	$2\pi r^2 + \pi r^2$

Ex 2: A soccer ball with diameter 30 cm is placed tightly inside a cube box. Find the difference between their surface areas.

30 cm

3

$A_L = A_T$ Sphere (Lateral Area)	$A_T = A_L + A_b$ (only hemispheres have a base)
$4\pi r^2$	$2\pi r^2 + \pi r^2$

Ex 3: How many times greater is the SA of the Sun than the Earth?

d_S=1 391 000 km
r = 695500

d_E=12 756 km   r = 6378

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