Team names: $\qquad$

## Application Exercise 1

The area and perimeter of compound shapes may be calculated in different ways.


What are the area and perimeter of the shaded region?
(A)
$A=230 \mathrm{~cm}^{2}$
$P=162.8 \mathrm{~cm}$
(B) $\quad \begin{aligned} & \mathrm{A}=230 \mathrm{~cm}^{2} \\ & \mathrm{P}=114.8 \mathrm{~cm}\end{aligned}$
(C)

$$
\begin{align*}
& A=185 \mathrm{~cm}^{2}  \tag{D}\\
& P=94.8 \mathrm{~cm}
\end{align*}
$$

A $=185 \mathrm{~cm}^{2}$
$P=162.8 \mathrm{~cm}$

## Application Exercise 2

The 50,000 disposable coffee cups that Australians throw away every 30 minutes would fill a Melbourne tram!


Environmental groups often illustrate big numbers to help people visualise why we should reduce our impact on the environment.

At Crusoe, we send 6 bins full of paper to recycling each week but over 100 kg ends up in the wrong bin and goes to landfill.


Which illustration would be most helpful to change our behaviour?

The amount of paper that could be recycled each week would...
(A) ...go around the school___ times!
(B) ...cover this learning space $\qquad$ times!
(C) ...go around the oval $\qquad$ times!
(D) ...cover ___ tennis courts!

## Some helpful facts:

- A4 paper measures $21 \times 29.7 \mathrm{~cm}$
- ___ sheets of A4 make $1 \mathrm{~m}^{2}$
- A4 paper weighs 80 grams $/ \mathrm{m}^{2}$
- The school block is $400 \times 200 \mathrm{~m}$
- Carpet tiles measure $50 \times 50 \mathrm{~cm}$
- Dimensions for Building D North:
- Oval average 'diameter' is 130 m
- Tennis courts are $24 \times 11 \mathrm{~m}$


