



Nets and surface area

Unfold the box

- Today: use a net to find the surface area of a solid.

A cube with edge 3

- What is its surface area?

Turn & talk: is it 27 or 54?

A net is the solid, unfolded

- Flatten the box and you can see every face at once.
- Surface area = the total area of the net.

$$6 \times (3 \times 3) = 54$$

- A cube has SIX identical faces, each 9 square units.

27 is the VOLUME. Different question.

Prisms: three matching pairs

- $SA = 2(lw) + 2(lh) + 2(wh)$
- Every face has a twin on the opposite side.

Half the right answer? You counted three faces, not six.

Your turn

- Prism 4 by 3 by 2. Surface area?
- Thumbs up when you have it.

Volume or surface area?

- Wrapping the outside $\rightarrow$ surface area $\rightarrow$ square units.
- Filling the inside $\rightarrow$ volume $\rightarrow$ cubic units.

Not every net has 6 faces — count what you actually see.

Now you

- → In-class practice sheet