GRADE 12 MATHEMATICAL LITERACY

IGNITE EXAM PREP
PAPER 2
Measurement • Maps & Plans • Probability

YOUR EXAM GAME PLAN Read the question carefully → choose the method → show your working → check your answer in context.

01 MAPS & PLANS

Scale
A scale of 1 : 50 000 means 1 unit on the map represents 50 000 of the same units in real life.

Real distance
Map distance × scale factor

Map distance
Real distance ÷ scale factor

Worked example
Map distance = 4 cm; scale = 1 : 50 000.
Real distance = 4 × 50 000 = 200 000 cm = 2 km.

Remember
Convert to the requested unit. Check the map key, symbols, direction and labels.

02 MEASUREMENT

Useful conversions
1 m = 100 cm • 1 km = 1 000 m • 1 L = 1 000 mL

Area and volume
1 m^2 = 10 000 cm^2 • 1 m^3 = 1 000 L

Rectangle
Area = length × width
Perimeter = 2 × (length + width)

Rectangular prism
Volume = length × width × height

Worked example
A floor is 5 m long and 3 m wide. Area = 5 × 3 = 15 m^2.

Remember
Choose the correct unit: length, area, volume or capacity.

03 PROBABILITY

Basic rule
Probability = favourable outcomes ÷ total equally likely outcomes

Range
Probability is between 0 and 1, or 0% and 100%.

Worked example
A box has 3 blue pens out of 10 pens.
P(blue) = 3 ÷ 10 = 30%.

Check the wording
Give the answer as a fraction, decimal or percentage only when the question asks for that form.

Remember
For equally likely outcomes, count the favourable outcomes and the total outcomes.

FINAL EXAM CHECKLIST

✓ Answer the command word: calculate, determine, compare, describe or verify.	✓ Show calculations clearly when working is required.
✓ Include correct units and round as instructed.	✓ For maps, check scale and convert units carefully.
✓ Check that the answer makes sense in the real-life situation.	✓ For probability, identify favourable and total outcomes.

REMEMBER: A correct answer needs the right method, clear working and a sensible interpretation.