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| **Using Scale Drawings** |
| Understands scale on a scale drawingThe scale is the ratio of a length in the drawing to the corresponding length in the actual object. For example, if a scale measurement of 5 cm represents an actual measurement of 35 m, then the scale is 1 cm : 7 m. The scale drawing and the shape of the actual object are similar. | Uses a scale to determine actual dimensionsOn the scale drawing, the length of a building is 15 cm. The scale of the drawing is 1 cm = 2 m. Determine the actual length of the building. 1 cm = 2 m. The scale factor is 2. 15 × 2 = 30So, 15 cm is equivalent to 30 m.The actual length of the building is 30 m. | Creates a scale drawing given a scale1 cm = 2 mFor example, the actual length was 30 m. So, the scale measurement is 30 ÷ 2, or 15 cm. | Solves problems using scale drawingsIn a scale drawing, a rectangular classroom is 18 cm by 24 cm. If the scale is 1 cm = 0.5 m, what is the area of the room?The area of the scale drawing is 18 cm × 24 cm = 432 cm2.Convert to square metres.1 cm = 0.5 m, so the scale factor is 0.5. Then, (1 cm)2 = (0.5 m)2, or 0.25 m2. The scale factor is 0.25.432 × 0.25 = 108The area of the room is 108 m2. |
| **Observations/Documentation** |
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