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EXAMS, TESTS, NOTES

# Physical Science Grade 12

## 2025 June Term 2 Exam

### Papers and Memos

- |       |   |             |
|-------|---|-------------|
| 2.1.1 | Define the term <i>kinetic friction</i> .   | (2)         |
| 2.1.2 | Explain why the coefficient of friction for the two blocks, <b>A</b> and <b>B</b> are different.  | (1)         |
| 2.1.3 | Draw a labelled free-body diagram showing all the forces acting on block <b>A</b> .   | (5)         |
| 2.1.4 | Calculate the mass of block <b>B</b> .  | (7)         |
| 2.2   | A rock of mass 100 kg lies on the surface of a planet <b>Y</b> . The acceleration due to gravity on the surface of the planet is $12 \text{ m}\cdot\text{s}^{-2}$ . |             |
| 2.2.1 | State the <i>Newton's Law of Universal Gravitation</i> in words   | (2)         |
| 2.2.2 | Calculate the mass of the planet <b>Y</b> if its radius is 700 km.  | (4)         |
|       |   | <b>[21]</b> |

# Physical Science Grade Exam Papers 24

**A Loxley**



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