Answer key: Particle (Point Mass)

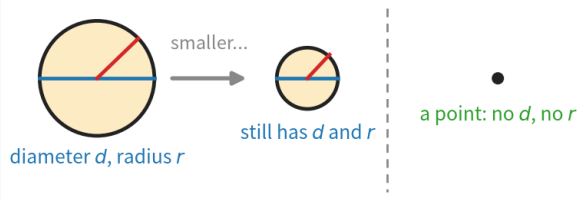
Physics with Tiaotiao 跳跳 · Kinematics · High School Physics
Study sheet for the video "Point Mass (Particle) Explained": answer key

Answers and explanations

Tap a blue time to jump to the part of the video that explains the question.

1. **B**. A particle is an idealized model. If a question asks about the scientific method, particle = idealized model.
▶ **Watch 9:36, Example 1**

2. **(1) F (2) T (3) F (4) F (5) F**
(1) Small is not enough. Whether it can be a particle depends on the problem we study, not on the object. Example: an atom, when we study its rotation, is not a particle.
(3) A particle differs from a geometric point: it has mass.
(4) Even a tiny ball has a diameter and a radius. A point has neither.



(5) Exam tip: a statement that introducing a concept is meaningless is almost always false.
▶ **Watch 11:56, Example 2**

3. **A**. For the velocity of the walking cat, its shape and size don't matter, so it can be a particle.
B The ball is spinning: if its own spin is involved, it can't be a particle.
C Landing on a stump depends on the bird's posture.
D Clearing the obstacle depends on the horse's posture.
▶ **Watch 14:07, Example 3**