ALAWAA

Gem



Science

الصف 4 الابتدائى

إجابات النماذج الاسترشادية لشهر نوفمبر

العام الدراسى 2024 - 2025

Model (1)

5 Marks

1 Choose the correct answer:

1. All of the following are signals that are received by eyes, except ..... .

   a) fire signals b) traffic light colors

   c) rescue flare d) a ringing bell

2. When the box you move is away from you, this represents ..... .

   a) a pushing force b) a pulling force

   c) a magnetic attraction d) the air motion

3. You can see the movement of the following objects, except ..... .

   a) the sea waves b) the rotation of planets around the Sun

   c) a running horse d) a flying airplane

4. All of the following are sources of light, except ..... .

   a) candles b) stars c) electric lamps d) moon

2 Write the scientific term for each of the following:

1. A tool used by humans to be able to see in dim light. (**Night vision goggles**)
2. The force that pulls objects towards the Earth's surface. (**Gravity**)
3. It is a push or pull that is applied to an object, causes it to change its position. (**Force**)
4. The change in an object's position relative to a fixed point. (**Motion**)

3 Answer the following questions:

1. Give a reason for why fireflies use different flashlight patterns to communicate with each other.

   - ..... **To warn off their predators or to attract their mates** ..... .

2. What happens when unbalanced forces are applied on a static object?

   - ..... **It moves in the direction of the greater force** ..... .

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Model (2)

5 Marks

1 Complete the following sentences from the two brackets:

1 Both humans and animals use ..... to communicate.

(smell – light)

2 By increasing the kinetic energy of an object. It travels a ..... distance.

(shorter – longer)

3 When a player kicks a ball, and this ball moves, this means that ..... is done.

(force – work)

4 The eye pupil of the fishing cat opens ..... than yours in dim light. (narrower – wider)

2 Correct the underlined word:

1 The nose receives the light codes and sends them to the brain. (**eye**)

2 Objects in motion have no energy. (**at rest**)

3 Air resistance acts in the same direction of the car motion. (**opposite**)

4 Light moves in curved lines. (**straight**)

3 Answer the following questions:

1 How can we state that an object is in motion?

- **When the position of the object changes relative to a fixed starting point.**

2 What happens when the forces acting on the rope of a tug-of-war game are balanced?

- **The rope will not move.**

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Model (3)

5 Marks

1 Complete the following sentences:

1. Fireflies produce light through a ....**chemical reaction**..... .
2. When a girl pushes her ball down, the gravity acts on the ball is in the ....**same**..... direction.
3. By increasing the speed of a car, it covers a ....**longer**..... distance.
4. When light strikes a smooth mirror, it is reflected in ....**one**..... direction.

2 Put (✓) or (✗):

1. Rescue flares send codes that tell the sailors where they are. (✓)
2. A book on a table doesn't move until force acts on it. (✓)
3. The car finally stops if it runs out of gas due to the friction force. (✓)
4. When a kid pulls his bag upwards, the gravity pulls it upwards too. (✗)

3 Answer the following questions:

1. What happens when a kid kicks a ball at rest?

   - **The energy from the kid's leg transfers to the ball, then the ball has energy and moves.**

2. What happens when unbalanced forces are applied to a ball?

   - **The ball could start moving, move faster or slower, or change its direction.**

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Model (4)

5 Marks

1 Choose from column (B) what suits from column (A):

(A)	(B)
1. Fireflies communicate with each other	a) can communicate using sound.
2. A box needs ..... to move	b) by producing light.
3. The ball moves for a short distance	c) unbalanced forces.
4. Humans and animals both	d) when gentle force applied to it.

1. ..... (b) ..... 2. ..... (c) ..... 3. ..... (d) ..... 4. ..... (a) .....

2 Put (✓) or (✗):

1. Different languages have similar codes. (✗)
2. Friction force increases the speed of a moving object. (✗)
3. Energy must be exerted to do work. (✓)
4. When opposite, unbalanced forces are applied to a static object, the object moves in the direction of the greater one. (✓)

3 Answer the following questions:

1. When a kid pushes a box and the box doesn't move, so no work is done. Why?

   - **Because the pushing force doesn't cause the box to move a distance and no change happens.**

2. What happens if a boy riding a bicycle stops pedaling?

   - **The friction force between the tires and the ground decreases its speed gradually until it stops.**

Model (5)

5 Marks

1 Choose the correct answer:

1. Reading and writing are methods of communication used by ..... .
   a) humans b) plants
   c) animals d) birds
2. When a ball stands on the ground without moving, the forces acting on it are ..... .
   a) unbalanced b) balanced
   c) pushing it up d) not equal
3. The moon isn't a source of light, because ..... .
   a) it gives of its own light b) it reflects the light falls on it
   c) it doesn't emit its own light d) it absorbs all the light falls on it
4. Shadows are formed when the light rays fall on all of the following objects, except ..... .
   a) a ball b) a glass window
   c) a tree d) a card board

2 Cross out the odd word:

1. Music – Thumb up – Facial expressions – Writing. (**Music**)
2. A running kid - Leaves move by the wind – Water falling – Rotation of the moon around the Earth. (**Rotation of the moon around the Earth**)
3. Football player kicks a ball - A fisherman pulled the fishing hook – Closing the desk drawer – A goal keeper pushes the ball to stop. (**A fisherman pulled the fishing hook**)
4. Clothes – Paper – Mirror – Wood. (**Mirror**)

3 Answer the following questions:

1. What is a code?
   - **It is a pattern that has a meaning.**
2. Why is the shockwave truck is the fastest truck in the world?
   - **Because it has 3 jet airplanes engines.**