



English private school of Kalba
Science – Assessment B Revision pack
UNIT 1 – Forces and Motion
WHAT HAVE YOU LEARNT?

Name: _____

Grade 3/ year 4: _____

Q1. We use forces every day, even when cooking. Write which forces Amir is using as he makes a cake. Where is he using a push or a pull or both?



Mixing the ingredients



Greasing the tin



Putting the cake mix
into a tin



Putting the cake
in the oven



Cutting the cake



Lifting a slice onto a plate

Q2. Saif teacher gave him three different surfaces and asked him to record how quickly the car stopped moving on each surface. Saif used the same car and pushed the car with the same force each time:

<i>Surface</i>	<i>Distance</i>
Wood	100 cm
Sandpaper	75 cm
Carpet	40 cm

a. What force stops the car from moving?

b. Which surface had the most friction? How can you tell?

c. Which surface had the least friction? How can you tell?

Q3. Mark each of these statements as True (✓) or False (✗).

- | | |
|---|-----------|
| a) Forces can make bubbles change directions. | [] |
| b) A pulling force make bubbles move. | [] |
| c) The bigger the force. The more the bubble will move. | [] |
| d) A push force makes bubbles move forwards. | [] |
| e) A pull force should make bubbles move back towards. | [] |
| f) A smaller force would make smaller bubbles. | [] |
| g) Objects start moving if a force is applied. | [] |
| h) Objects can be moved further if they are given a smaller push. | [] |
| i) A toy car will stop moving because a force is acting on it. | [] |

Q4. Look at the shoes below and decide if they have good grip (high friction) or poor grip (low friction).

a. Ballet shoes:



b. Sports shoes:



c. Flip-flops:



d. Running shoes with spikes:



e. Football boots:



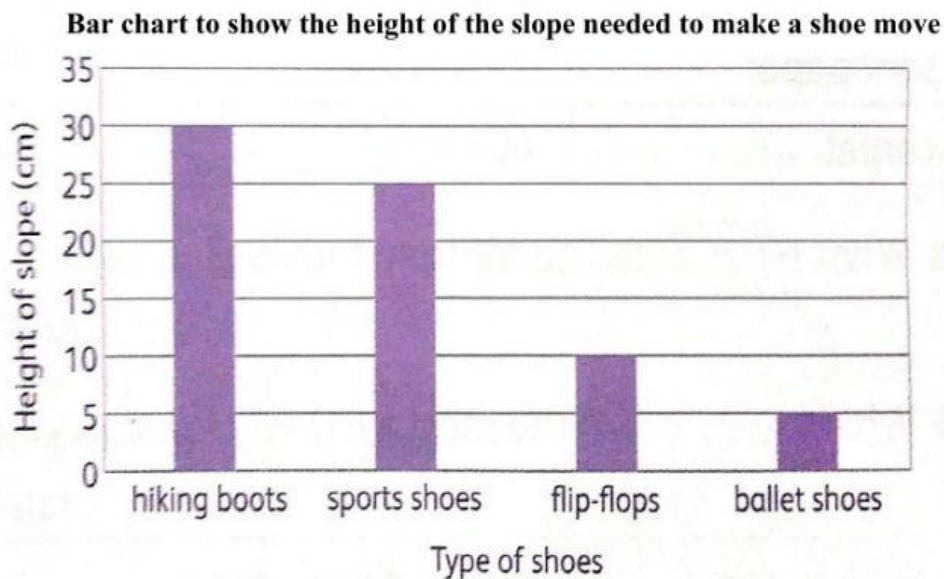
Q5. Fatima made an animal shape using play dough.

a. Which force did she use to change the shape of the play dough? Push, pull or both.

b. What happened to the force needed to move the empty basket of clothes?
Explain your answer using the words 'friction' and 'surface'.

c. Abdullah tried to move the washing basket full of clothes on the carpet.
Which force did he use to move the washing basket full of clothes on the carpet?
Push, pull or both. _____

Q6. Ade and Ebele tested some shoes on a slope to see how well they gripped the surface. They recorded, in centimeters, how high they had to raise the slope for the shoe to move. They showed their results on a bar chart.



a) Which shoe needed the highest slope?

b) Which shoe needed the lowest slope?

c) Which shoe needed to be at a slope of 25 cm?

d) Find the difference between the height of slopes needed for sports shoes and flip-flop.

Q7. Look at the pictures below and decide if the object has high or low friction.



Slide



Woolen gloves



Banana skin



Racing car tyre



Trolley /push cart



Trainer



Ice rink



Running track

Q8. Ade and Ebele made a balloon racer. They tested the racer on different surfaces and recorded their results in this table.

Surface	Distance travelled in cm
Wood	150 cm
Playground	125 cm
Grass	46 cm
Carpet	57 cm

a. Which surface had the greatest friction?

b. On which surface did the racer travel the furthest?

Q9. A force can be a push or a pull:

- a. What force is used to start the drawers moving?

- b. What force is used to move a pram?

- c. What force is used to kick a ball?

- d. What force is used to stop the pushchair moving?

- e. What force is used to put on the trousers?

Q10. Look at these shoes and fill in the blanks.



Ballet shoes



football boots



climbing boots



flip-flops



trainers

- a. Which shoes will be best to climb a mountain? _____
- b. Which shoe has the least friction? _____
- c. Seena wants to go for a party. Which pair of shoes should she choose?
