

FORCE AGE: 5-10y

Version1, March 2021

Pushing and pulling,
Resting and moving.
I want to be in a steady state,
Change, oh! I hate.
Surrounded by forces, some
I know, some not,
Yet, a beautiful thought



ASSIGNMENT 1

Children will learn to identify, the two basic categories of force viz, push and pull from the images below. Children may be reminded that push and pull is object specific.

1



☐ Push
☐ Pull

2



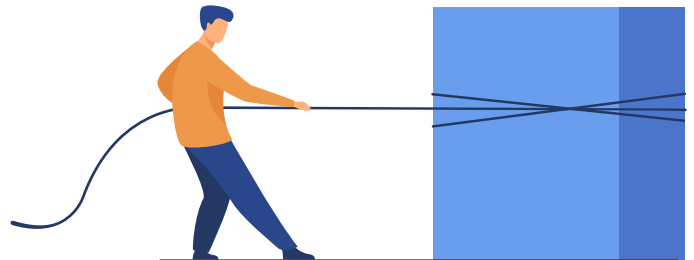
☐ Push
☐ Pull

3



☐ Push
☐ Pull

4



☐ Push
☐ Pull

5



☐ Push
☐ Pull

6



☐ Push
☐ Pull

7



☐ Push
☐ Pull

8



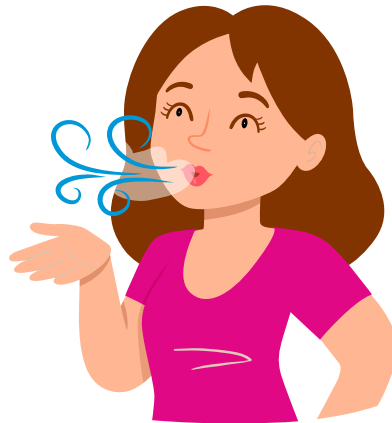
☐ Push
☐ Pull

9



☐ Push
☐ Pull

10



☐ Push
☐ Pull

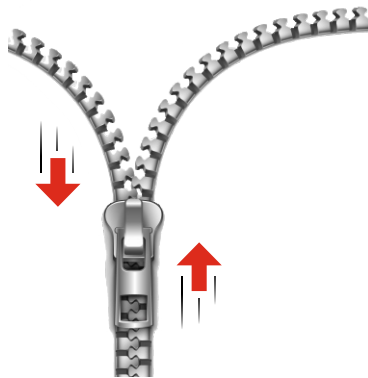
ASSIGNMENT 2

The images below will indicate both push and pull forces. The children will be identifying the push force and the pull force and mark them with help of different colours, or by different symbols, of their choice.

1



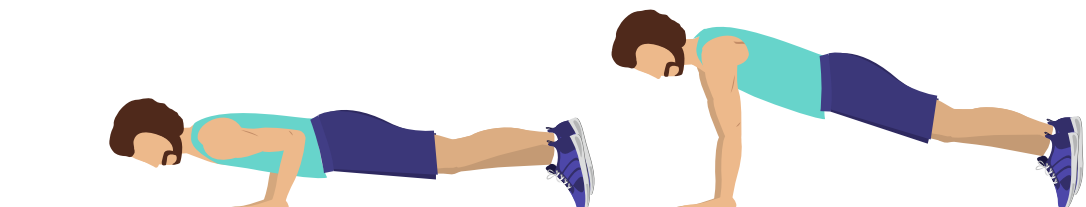
2



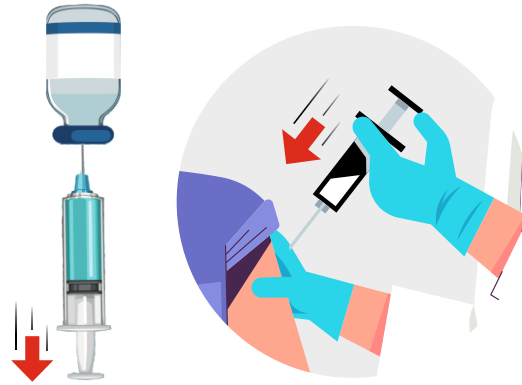
3



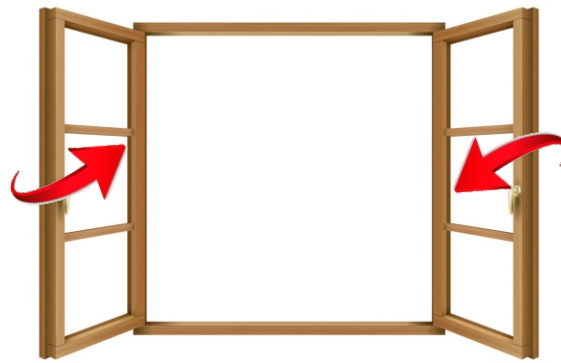
4



5



6



7



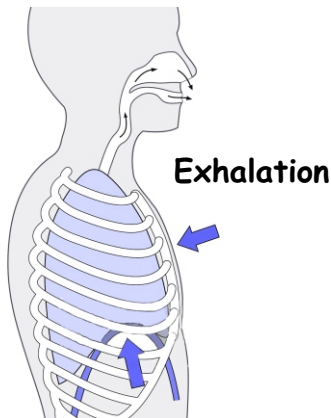
8



ASSIGNMENT 3

Any force results in motion. The object on which force gets applied, moves, to a new position. The exercise below, enables children to identify the change in position of object with respect to applied force (children will show the movement with the help of an arrow from point of origin to its final location). It is desirable that children also try to figure, what kind of force (push/ pull) is being applied on any or all the moving objects.

1



Type of FORCE

- ☐ Push
☐ Pull

ADDITIONAL NOTES

Describe the force acting on air and show its movement. Is there any other movement that you notice? Try exhaling and inhaling and point out what other parts of body move and the type of force?

2



Opening an Umbrella

Type of FORCE

- ☐ Push
☐ Pull

ADDITIONAL NOTES

Describe the force acting on umbrella and indicate its movement.

3



Inserting the ring

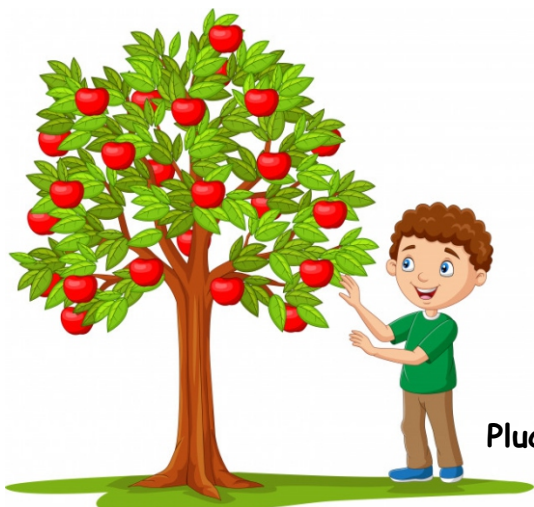
Type of FORCE

- ☐ Push
☐ Pull

ADDITIONAL NOTES

Describe the force acting on the ring and show its movement.

4



Plucking an apple

Type of FORCE

- ☐ Push
☐ Pull

ADDITIONAL NOTES

Describe the force acting on the fruit and show its movement.

5



Churning Buttermilk

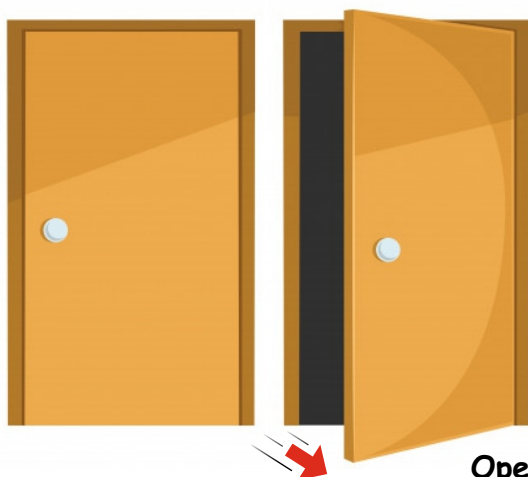
Type of FORCE

- ☐ Push
☐ Pull

ADDITIONAL NOTES

Describe the force acting on the Buttermilk and what happens to the position of Butter

6



Opening of door

Type of FORCE

- ☐ Push
☐ Pull

ADDITIONAL NOTES

Describe the force acting on the door. Has the Door moved?

ASSIGNMENT 4

From the words below, children must form sentences. The activity is aimed at inculcating practice of sentence formation and learning new words.

1

Pushes
box the
the
boy

sister's
the pulled
his boy
teasingly
hair

clothes
from the
lady pulled
rope

in
the push
socket
plug

Sr.No.	Sentence

2

I
pull I
going am
will to
water

am I is
exercise
the against
pushing wall
a it good

when
I my on
paper Pen-tip
colour oozes
push

plough
bulls to
ready farm
will be the
sow the are
pulling

Sr.No.	Sentence

ASSIGNMENT 5

In the table below are anagrams for terms with reference to Force. The activity is aimed at encouraging complex understanding in children and helping them learn spellings.

1

Anagram

Word

U S P
H

2

L U P
P P

3

M O I
N O T

4

I N I
F O R
T C R

ASSIGNMENT 6

From the images below, children are expected to answer what happens when? For most diagrams we are presenting two scenes, and the children are expected to explain how outcomes will change in each scenario.

1

WHAT HAPPENS WHEN



Rubber tyres on ice

2

WHAT HAPPENS WHEN



Chained rubber tyres on ice

3

WHAT HAPPENS WHEN



Rolling a ball on the floor

4

WHAT HAPPENS WHEN



Rolling a crumpled paper on the floor

5

WHAT HAPPENS WHEN



Broom on marble floor

6

WHAT HAPPENS WHEN



Broom on ground

7

WHAT HAPPENS WHEN



Skating on Ice

8

WHAT HAPPENS WHEN



Skating on Soil

ASSIGNMENT 7

Children are encouraged to read the paragraph below and answer the questions that follow. The activity is aimed at enhancing student comprehension, reproducibility, and writing skills.

It was a breezy day. Ram was leaving his home for school. His mother was sweeping the marble floor and collecting the dirt on the dirt pan. She opened tap to wash her hands, but there was not water in the tap. So, she went back to the well to draw some water. she picked up the pitcher and came back inside by pushing the door open. She washed her hand, pulled out the drawers in kitchen, took out the tiffin boxes and packed lunch for Ram and his sister Gita. Gita was also getting ready for school. She was trying to tie her hair pleats. But Ram was troubling her by pulling her hair and pushing her away from the mirror. She finally came to her mother crying. Ram had worn his socks and was skating on the floor. His mother kept warning him that the socks may tear apart. Gita was enjoying her brother skate; she quickly completed her hair pleats and ran over to Ram. Now both were skating. Mother was sure that they were going to be late to school. They quickly picked up their milk glasses and gulped it down. Then the two pedalled their cycles and rushed towards school. This was almost an everyday scene in Ram and Gita's home. How do you spend your morning before going to school?

Questions

1. Describe all pull forces in the paragraph.
2. Describe all push forces in the paragraph.
3. Describe actions denoting friction (less or more)
4. Why was Ram able to skate in his house?
5. What if Ram's house floor was not made of marble but made of mud or cow dung thatched. would his mother use the normal broom to clean floor?

Below is our collection of worksheets of various other topics:-

KriVid(ya) Encouraging Rationale Practice Worksheet for Children

ANIMALS AGE: 5-10y Version 1, March 2021

*We, that is I and you,
Are all a part of this animal crew.
Our home, this marbled blue,
Binds us together like a glue.*

KriVid(ya) Encouraging Rationale Practice Worksheet for Children

LIVING/NON-LIVING AGE: 5-10y Version 1, March 2021

Living / Non-Living

*We breathe and move,
We grow and reproduce,
If you do the same,
Living thing is your name.
If you think otherwise,
You shall be called,
Nonliving, high fives!!*

KriVid(ya) Encouraging Rationale Practice Worksheet for Children

PLANTS AGE: 5-10y Version 1, March 2021

*We have sown a seed,
We have removed the weed,
It takes a few weeks,
The future ain't bleak.
Two leaves sprout,
Like stretching their art,
The roots are growing deep underground,
she is beginning to GROW and make us PROUD.*

KriVid(ya) Encouraging Rationale Practice Worksheet for Children

MATTER AGE: 5-10y Version 1, March 2021

*I am here, I am there,
I am everywhere
I can flow and stay,
You can touch it you may
You can see, hear and touch,
There is no rush
My form will change,
When particles re-arrange.*

States of Matter

KriVid(ya) Encouraging Rationale Practice Worksheet for Children

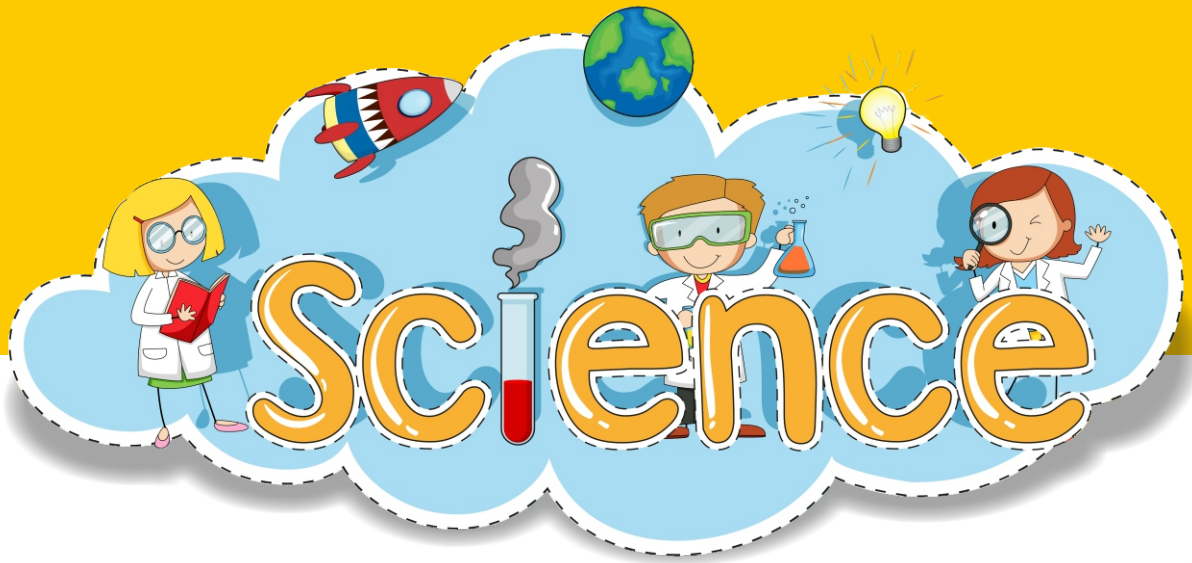
WORK AND ENERGY AGE: 5-10y Version 1, March 2021

*I eat well,
No, no, not until my stomach swells.
My food gives me energy.
Making me feel like a charged battery.
Now I can do some work,
And add to it my little quirk.*

KriVid(ya) Encouraging Rationale Practice Worksheet for Children

HUMAN BODY AGE: 5-10y Version 1, March 2021

*How happy I am
For I have this form
I swing, I kick,
I see and I lick,
I dance, I sing,
I wink and I think,
I hear, I speak,
Oh! my body is a trick,
A trick, a trick,
Oh! my body is a trick*



KriVid(ya)

We practice **Kriya (action)** based **Vidya (learning)**
We aid experiment-oriented science learning through a do-it, see-it, learn-it approach. Our learning models are aimed at encouraging rationale and fostering a concept driven understanding of science.