SS Physics I

Score /20

No.		Name	

(in four digits)

“Galileo's Gravity Experiment, Apollo 15 Experiment”

Worksheet

David R. Scott Apollo-15 Mission Commander

Dropping the Hammer and Feather (falcon) -- Galileo's Gravity Experiment /Apollo-15 EVA-3

July 26,1971;09:34:00 am(EST)

Well, in my left hand, I have a (1)_____; in my right hand, a (2)_____.
And I guess one of the reasons we got here today was because of a gentleman named (3)_____, a long time ago, who made a rather (4)_____ discovery about (5)_____ objects in (6)_____ fields.
And we thought where would be a better place to confirm his findings than on the (7)_____.

And so we thought we'd try it here for you.
The feather happens to be, appropriately, a falcon feather for our Falcon.
And I'll (8)_____ the two of them here and, hopefully,
they'll hit the ground at the (9)_____ time.

(How about that!)

Which proves that Mr. Galileo was (10)_____ in his findings.

Review:

Free Fall, Projectile motion and Newton's Laws of Motion

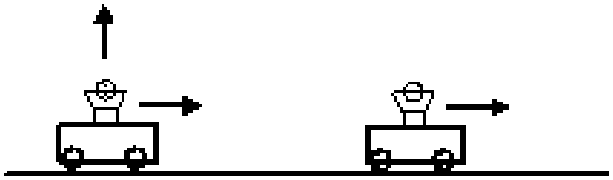
Experiment 1

If the cart is at rest, the launched ball lands on the cart.

If the cart moves at a constant velocity and the ball is launched, where will the ball land with respect to the cart?

1. The ball lands on the cart.
2. The ball lands behind the cart.
3. The ball lands ahead of the cart.

→ (11)_____



What is the motion of the ball?

→ (12)_____ motion or (13)_____ motion.

What force acts on the ball while it is in the air?

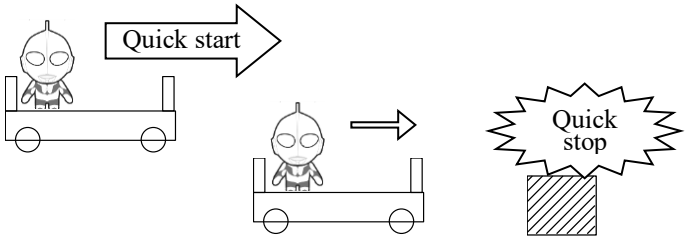
→ Only (14)_____ acts on it vertically. (15)____ _____ acts on it horizontally.

What are the horizontal motion and the vertical motion of the ball in the air?

→ Horizontal motion is a (16)_____ speed motion.
So both the cart and the ball move horizontally at the (17)_____ speed.
Vertical motion is like a (18)_____ fall.

Experiment 2

Make a few sentences about the Experiment 2.



Keywords: Inertia, Rest, Motion, Newton's First Law, Forward, Constant Velocity