Elementary school 6th grade Math 4 YouTube version

Power Practice Printable Part 2　Elementary school 6th grade math 4

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Characters in the story

Assume child A(Kenta) is shorter than child B

Assume chile B(Yoshio) is taller than Child A

Child C(Takeshi) is classmate of Kenta and Yoshio.

Track and field mania

Teacher D: Narrator and person who appears in the final scene.

(1) Opening (title board)

Power Practice Printable Part 2

Elementary school 6th grade

Math 4

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< A part to change the title>

(2) Explanation scene of scene setting

A conversation in the classroom after running and jumping in physical education class...

(3) Scenario for conversation in the classroom <Small Room??>

B: "Hey, Kenta, what was your record in the high jump today?

A: It was 115cm. What about you (Yoshino)?

B: My record was 115cm too!

A: Really? The last time when we measured the record for 50m, it was 8.0 Seconds and our record was same right?

B: Same goes for high jump record, isn't it interesting?

C : Yoshio should be able to jump higher. If you watch the Olympics or the World Championships in Athletics, you'll see that the high jumpers are all very tall. So as you are taller, you should be able to jump higher.

B: When you run and jump, does the height of your back have anything to do with the record? Let's go to the library together and find out.

A & C: Yeah, let’s do it.

(4) Scenario of conversation in the library

In the library, one person is in front of the computer, and the other two people are doing research….is a book about the relationship between high jump records and height.

C "Hey, hey, look at this. As expected there is a relationship between height and high jump records!

A "Let me see. It says here that the record for the high jump has something to do with your height and the record for the 50-meter run.

B "Oh, so not only your height but also your 50m running record has connection to this?

A "One study says that the formula for finding the target height (cm) for the high jump is 'half Of your height (cm), plus 120, minus 10 times of your 50-meter running record (seconds)'

C "(Height ÷ 2) + 120 - (50m running record x 10)?

(5) Scenario of Kenta calculating his own goal.

A: "I'm going to calculate what my running high jump goal is once. My height is 140cm, and my record for running 50m is 8.0 seconds, so if I apply that to the equation above...

A「（１４０÷2）＋１２０－（8.0×１０）

＝70＋１２０－８０

＝１９０－８０

＝１１０

So... I guess my goal is to be 110cm.

B "Kenta's record for today's high jump is 115cm, so you've surpassed your goal! That's great! I wonder what would be my goal is.

(6) Scenario of Kenta saying, "You don't need to do the math to understand."

A: "I think Yoshio's height is 160cm, right?

B: " Yeah, that's right"

A "Then you don't need to do any calculations to know that your goal would be higher than mine.

B. "How do you know that?

"Why did Kenta say that he could tell that Yoshio's record would be higher than his own without doing any calculations?

(7) The scenario where Kenta answers the reasons.

A "Because the equation for finding the target is the same for the 50-meter run, I think we can just compare by dividing hight÷2. If you compare our heights, you'll see that Yoshio is taller than me, so his goal will also be higher than mine"

B "I don't really understand it. Can you tell me in detail about it?

A "If we apply the values of the heights of two people and the record of the 50-meter run to the formula for finding the target

Mine will be (140 ÷ 2) + 120 - (8.0 × 10)

And Yoshio's will be (160 ÷ 2) + 120 - (8.0 × 10)

B: "Yeah."

A "Since 120 - (8.0 × 10) of the two equations are the same, if you look at the part of height ÷ 2, that is, the large and small values of height, you can tell the result without calculating. You can see how high or low the result is without calculating. Yoshio's height is 160cm and mine is 140cm, so we know that Yoshio's goal will be higher because he is taller.

C: "I see, that's how it is!

(8) A scenario where Yoshio calculates his own goals.

B "I understand your explanation now! By the way, if I calculate my goal then,

My height is 160cm, and my record for running 50m is 8.0 seconds, so if I apply that to the equation above...

B「（160÷2）+120−（8.0×10）
=80+120−80
=200−80
=120

So... I guess my goal is to be 120cm.

So, today's record for the high jump was 115cm, so I can still do my best. All right, leave it to me! I'll do my best next time.

A: "I'm going to try my best to exceed my goal, too!

C "You may not be able to say that the formula is necessarily correct, but it is a good way to learn about your own goals. I'll find out my goal too! But I don't remember my height or my 50m time! Let's go ask the teacher!

A and B: "What is that, a...?

(9) It's important to explain things in a clear and concise manner.

A scenario in which the importance is expressed.

D) Like Kenta said earlier, "When you want to convey someone that your explanation is correct, it is important to show them the numbers that form the basis for your explanation and explain it in a reasonable manner.

(10) Ending