NUMBER SLIDE

Recommendation:

For the first lesson it is recommended that students create and use their own number slide.

This allows students to see what is happening when a number is multiplied by ten. It is very easy for students to develop faulty understanding of mathematical processes. Initially using a physical number slide focuses the student's attention to what is truly happening with numbers when they are multiplied by ten, hundred or thousand.

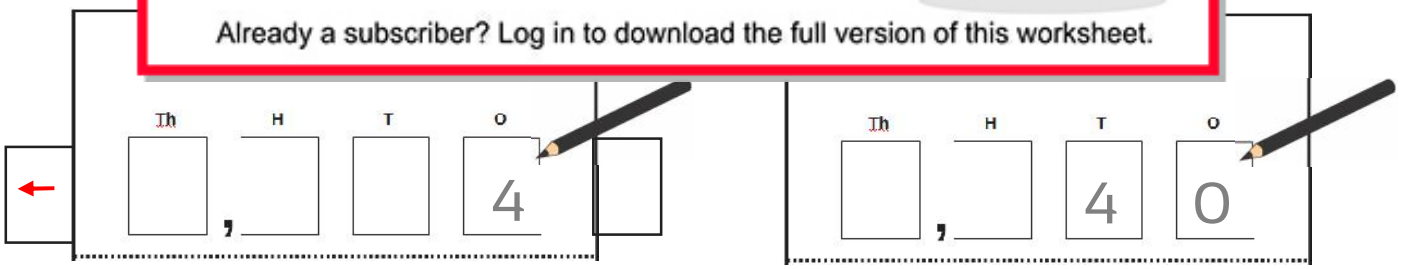
Lesson Plan:

1. **Create individual number slides:**

- Have students create their own number slide. Use Slide A (thousands), B (hundred-thousands) or C (thousands to thousandths) attached, depending on the numbers students are learning about
- Insert

2. **Using**

- Write
- Have
- **Ask:** W
- Have
- **Say:** N
- **Ask:** W
- **Say:** W

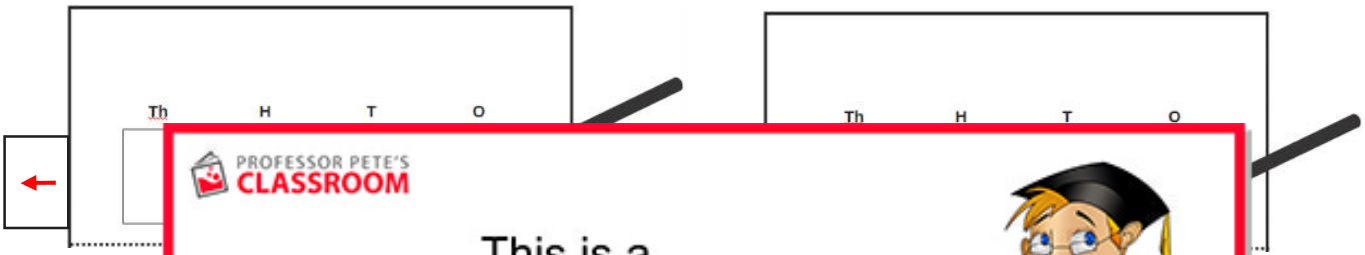


- **Say:** When we multiply by ten, the numeral 4 moves one place to the left.
- **Ask:** When we multiply numbers do they get larger or smaller? (larger)
- **Have the students say or write:** Multiplying by whole numbers makes the number **larger**. When a number is multiplied by 10, the digits move one place left.

Think:
"Multiplying by whole numbers the number gets **larger.**"
x 10: one place left

NUMBER SLIDE

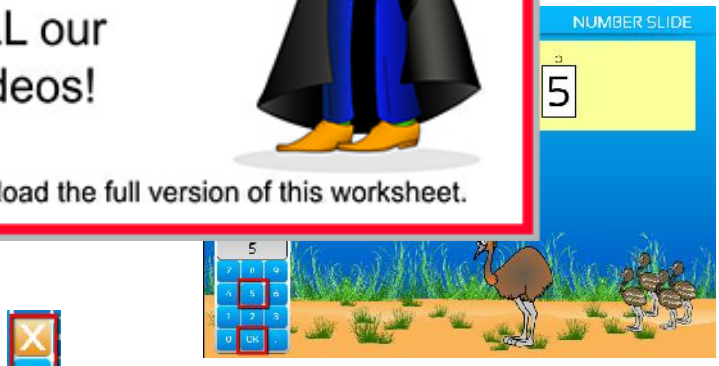
- Write 97 x 10 = on the board. Have students rub out the 4 on the strip and put in 97.
- **Say:** We are multiplying 97 x 10. When we moved the slider when multiplying 4 x 10, we moved it one space to the left. Do that with your slider strip now. Move the strip one space to the left.
- **Ask:** What do you see now? (9 in the hundreds place, 7 in the tens)
- **Ask:** What do we need to do so the 97 looks like nine hundred and seventy? (put a "0" in the ones place)
- Have students write a zero in the ones space to "hold the place".



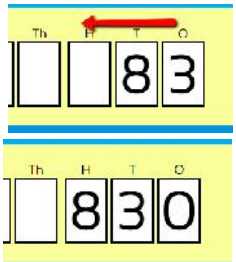
- Repea

Introduce t

- Close ge and th
- Explai the nu
- Point
- Enter
- **Say:** v
- **Ask:** What will happen? (the 5 will move to the tens place)
- Click X 10 in the Toolbox and the 5 will slide to the tens place and a zero appears.



- **Ask:** Why does the zero appear? (to "hold the place")
- Repeat with a larger number:
- Enter **83 > OK**
- Have students write what is happening and have them write their answer.
- Click on the X 10 in the Toolbox.
- Check their answers.
- Repeat with other numbers off the worksheet. Pay close attention to numbers with zeros. Work with 3-digit numbers x 10



Complete worksheet WS1 OR continue with extending to X 100 or x 1000 with or without decimals.

A

Th	H	T	O
	,		

	,		