SINGLE DIGIT PRIME NUMBERS

FACT 1: A Prime number does not have factors other than 1 and itself.

7 = 1 x 7 → 1 and 7 are the only factors of 7
→ 7 is a prime number

23 = 1 x 23 → 1 and 23 are the only factors of 23
→ 23 is a prime number

FACT 2: A prime number represents some quantity. Therefore, 0 is not a prime number.

All numbers except for 0 represent some quantity.

The number 0 represents no quantity. It is not a prime number.

FACT 3: A prime number has two different factors. Therefore, 1 is not a prime number.

1 = 1 x 1 → 1 does not have two different factors.

FACT 4: The smallest prime number is 2.

2 = 1 x 2 → 1 and 2 are the only factors of 2.

FACT 5: None of the even numbers, except 2, are prime numbers.

4 = 2 x 2; 6 = 2 x 3; 8 = 2 x 4; 10 = 2 x 5

These numbers are multiples of the prime number 2, and, therefore, they are not prime numbers themselves.

FACT 6: The only single-digit prime numbers are: 2, 3, 5, and 7.

The multiples of prime numbers are not themselves prime.

1. **State why the following single-digit numbers are not prime.**
   0, 1, 4, 6, 8, 9
2. **What would be the smallest double-digit prime number?**
3. **What is the largest double-digit prime number?**

End of Lesson