For Loops and Java

Alise, Adam, Tanya, Christopher

Do Now (5 min)

With your table discuss how to get Java to output this.

Hint...How do we print to the console in java?

Java is fun
Java is fun
Java is fun
Java is fun
Java is fun

```java
System.out.println("Java is fun");

System.out.println("Java is fun");

System.out.println("Java is fun");

System.out.println("Java is fun");

System.out.println("Java is fun");
```

```
Java is fun
Java is fun
Java is fun
Java is fun
Java is fun
```

Learning Targets

I can describe the purpose of each part of a for loop.

❏ Initialization
❏ Check the exit condition
❏ Increment

I can create a for loop to make my code more efficient.

Hook

Jump 2 times

Wait 1 seconds

Jump 2 times

Wait 1 seconds

Jump 2 times

Wait 1 seconds

Jump 2 times

Wait 1 seconds

Jump 2 Times

Wait 1 seconds

Turn and Talk

How many times did you jump in total?

Which instructions get repeated?

Can you come up with an **optimized** way to give the same instructions?

Jump 2 times
Wait 1 seconds
Jump 2 times
Wait 1 seconds
Jump 2 times
Wait 1 seconds
Jump 2 times
Wait 1 seconds
Jump 2 Times
Wait 1 seconds

DRY

Don't Repeat Yourself

In Java

Say I wanted to print *

```
Java is fun
Java is fun
Java is fun
Java is fun
Java is fun
```

Direct/Guided Instruction

```java
for(int counter = 0; counter < 5; count++){
    System.out.println("Java is fun");
}
```

```
System.out.println("Java is fun");
```

```
System.out.println("Java is fun");
```

```
System.out.println("Java is fun");
```

```
System.out.println("Java is fun");
```

```
System.out.println("Java is fun");
```

int counter = 0; (**Initialize a variable**)

counter < 5;   (**Check the exit condition**)

Count++   (**Increment**)

Questions for Conceptual Understanding

1) Why the exit condition in less than 5
2) What if we start our counter from 1? How this will affect the exit condition?
3)