

Keisha the CIA Agent: Understanding Digital Signals

## **Meet Keisha!**



Hey guys. I am
Keisha. I am a CIA
agent! CIA stands
for the "Central
Intelligence
Agency."



The CIA is an organization that provides information about what is going on all around the world to the president and other important people in the government. For example, the CIA would collect information about the relationships between other countries to tell the president.

# **Using Codes**

Because a lot of the information is top secret, the CIA sends information using codes. Codes are patterns that mean something. Codes are used to keep messages private. There are a lot of different types of codes!

Here are a few examples:

#### **Morse Code:**

Patterns of dots and dashes to represent the alphabet and numbers.

Take a look at this code:

.--..../----.../-..../-----...

It says, "What time is recess today?"



### **Computer Code:**

Patterns of letters, numbers, and symbols that tell a computer what to do.

Take a look at this computer code:

It makes a hamburger emoji appear on a website!



#### **Secret Code:**

Patterns of letters or numbers that someone creates. For example, if you and your friend create a code that only you two know what certain shapes, letters, or numbers mean!

$$1 = A$$

## **Choosing Which Code to Use**

Keisha always uses secret codes! This is because no one else will be able to understand the codes. She can keep important information private.

For example, would you know what this code meant?

GRASS KNOW OPEN BALL

If you had the key to the code, you would know that it says, "War maybe Greenland talk," which means "There could be a war in another country. We need to talk about it."



Sometimes, Keisha also uses computer code. This is because computer code can create databases where important information is stored. A database is a place to store a lot of information, called data. For example, there could be a database with information on all the names, birth dates and addresses of every person at your school. Databases like this might be private because people don't want everyone to know where they live.



#### **Did You Know?**

The CIA has a special page on its website just for kids!

Check it out:

https://www.cia.gov/kids-page/k-5th-grade

## **Did You Know?**

Throughout history, codes were used by the military. For example, during World War II, the military used the Navajo language as code. The military used words from the Navajo language so enemies wouldn't know what they were saying. The initial code consisted of 211 vocabulary words. By the end of the wear, there were over 411 words that are used!

Take a look at these examples of words that were used during the war:





PLANES	WO-TAH-DE-NE-IH	AIR FORCE
DIVE BOMBER	GINI	CHICKEN HAWK
TORPEDO PLANE	TAS-CHIZZIE	SWALLOW
OBS. PLAN	NE-AS-JAH	OWL
FIGHTER PLANE	DA-HE-TIH-HI	HUMMING BIRD
BOMBER PLANE	JAY-SHO	BUZZARD
PATROL PLANE	GA-GIH	CROW
TRANSPORT	ATSAH	EAGLE

Image courtesy of www.cia.gov

Can you think of other reasons people might want to write in code?

