

FUZE BASIC

Worksheet: 4a

"It's String Theory.. Knot!"

The next order of business is to get the computer to **store** something that **we type** in. Our goal is to write our very own awesome quiz - But first we need to learn a few important commands.

We are going to use something called a **string**. A string is a **text variable** used just like the "Girls = 15" variables in the previous sheet, but we use them to **store text** not **numbers**.

Computer strings use this **symbol**: \$

We need to learn another important command too: **INPUT**

INPUT works like the **PRINT** command, it **prints** what you put in the **speech marks**, but then we use a **string** to save the answer. Have a look below:

```
PRINT "Hello, my name is FUZE. "  
INPUT "What is your name? " , name$  
WAIT (1)  
PRINT "Hello, "; name$ ;"! Nice to meet you! "  
END
```

Remember: when the computer prints **name\$** it will print **whatever you typed in**.

Don't forget about the commas and semi colons!

Below is a small example quiz. Our goal at the moment is to get a working, good looking program - I have used **PRINT** to put a line space between the sentences - try this out for yourself!

```
CLS  
FONTSIZE( 3 )  
INK = YELLOW  
  
PRINT "Welcome to the quiz - I am your host, THE FUZE. "  
PRINT  
WAIT( 1 )  
PRINT "These questions are TRUE or FALSE answers. "  
WAIT( 1 )  
CLS  
INPUT "Question 1. PIKACHU is an Electric type Pokemon,  
TRUE or FALSE? ", answer$  
PRINT  
WAIT( 1 )  
IF answer$ = "TRUE" THEN  
    PRINT "CORRECT! PIKACHU is an Electric type! "  
ENDIF  
IF answer$ = "FALSE" THEN  
    PRINT "INCORRECT! Better luck next time! "  
ENDIF  
END
```

IF AND THEN.

We need to talk about **IF** and **THEN**. An **IF statement** tells the computer to do something **only if a condition is met**.

IMPORTANT: For every **IF** statement we use, we must put an **ENDIF** at the end.

Here, we use an **IF statement** to print "Correct!" Or "Incorrect!" On the screen depending on the **answer given**.

This is a very simple quiz program, there is only one question!

CHALLENGE: Can you **add** another question to this quiz? Your questions can be about **anything** you like, you don't have to use our example!

FUZE BASIC

Worksheet: 4B

"It's String Theory.. Knot!"

By now you should have a few questions on your quiz - but every good quiz needs a SCORE. We are going to use a simple **variable** to keep note of the score.

```

SCORE = 0
CLS
FONTSIZE( 3 )
INK = YELLOW

PRINT "Welcome to the quiz - I am your host, THE FUZE. "
PRINT " "
WAIT( 1 )
PRINT "These questions are TRUE or FALSE answers. "
WAIT( 1 )
CLS
INPUT "Question 1. PIKACHU is an Electric type Pokemon,
TRUE or FALSE? ", answer$
PRINT " "
WAIT( 1 )
IF answer$ = "TRUE" THEN
    PRINT "CORRECT! PIKACHU is an Electric type! "
    SCORE = SCORE + 1
ENDIF
IF answer$ = "FALSE" THEN
    PRINT "INCORRECT! Better luck next time! "
ENDIF

CLS
WAIT ( 1 )
PRINT "Let's see how well you did. "
PRINT " "
WAIT ( 1 )
PRINT "You scored "; SCORE ;" out of 1. "
PRINT " "
WAIT ( 1 )
IF SCORE = 1 THEN
    INK = GREEN
    PRINT "Well done! Full marks! "
ENDIF
IF SCORE = 0 THEN
    INK = RED
    PRINT "0 Marks! Better luck next time!
ENDIF
END
    
```

At the start of your quiz, **add the line: SCORE = 0**

(It is **0** because the player hasn't answered any questions yet)

We want to **add 1** each time the player answers the question **correctly**.

To do this, we place the line:

SCORE = SCORE + 1 Inside the **IF statement** for the **correct answer**.

This means that if the player answers **incorrectly**, then they do not score a point!

Another clever thing we can do to really bring your quiz to the **next level** is to let the player know **how well** they did at the end.

First we use the **variable SCORE** to print the player score on the screen.

Next, we use **IF statements** to give the player a message.

CHALLENGE:

Can you **add** questions to your quiz so that you have a total of 3?

Your challenge is to turn this into a full, awesome quiz that **you** have designed.

We're talking **colour**, different **fontsizes**, whatever you like!