**Introduction (30 sec)**  
"Hello everyone! Today, we’ll explore a fun Python problem—calculating weight on Mars! 🚀 But before we jump into coding, let’s break down the key concepts we’ll be learning today.

Our focus will be on:  
1️⃣ Understanding that each variable has a **type** (like numbers or text).  
2️⃣ Difference between assigning variables and using them.

3️⃣ How to **convert** between different types, also known as ‘casting’.

By the end, you’ll be comfortable using these concepts in Python. Let’s get started!"

**Step 1: Understanding Variables & Their Types (1 min)**  
"In Python, a **variable** is like a small storage box in your computer where we keep data. Every variable has three things:  
🔹 A **name** – so we can refer to it later.  
🔹 A **type** – like a number (integer/float) or text (string).  
🔹 A **value** – the actual data it holds.

For example:

python

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earth\_weight = 70

Here, earth\_weight is a **variable name**, it holds a **number** (type: integer), and its value is **70**."

**Step 2: Using Constants Instead of Variables (1 min)**

*"Instead of using a variable for the gravity factor, we can use a* ***constant****. A constant is a fixed value that doesn’t change throughout the program.*

For example, the gravity on Mars is **0.378** times Earth's gravity. We can define it like this:

python

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MARS\_MULTIPLE = 0.378

🔹 **MARS\_MULTIPLE** is written in all caps to indicate it’s a constant.  
🔹 This helps make our code clearer and prevents accidental changes."

**Step 3: Type Conversion (Casting) (1 min)**  
"In Python, when we take input from a user, it’s **always** a string (text). But we need numbers to do calculations. So, we use **casting** to convert it.

Example:

python

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earth\_weight = input("Enter a weight on Earth: ")

earth\_weight = float(earth\_weight)

🔹 input() gives us text (like '70'), but we convert it to a **float** (like 70.0) using float().  
🔹 Now, it can be used in math calculations!"

**📌 Summary (30 sec)  
"Great job! 🎉 Today, we learned:  
✅ Variables store data and have types.  
✅ We must assign before we use variables.  
✅ We convert types using float() to perform calculations.**