REVIEW: PRIMITIVES, OBJECTS AND THE JAVASCRIPT ENGINE

PRIMITIVES

- 👉 Number
- 👉 String
- 👉 Boolean
- 👉 Undefined
- 👉 Null
- 👉 Symbol
- 👉 BigInt

↑
PRIMITIVE TYPES

JS ENGINE

STORED IN →

CALL STACK

HEAP

STORED IN →

OBJECTS

- 👉 Object literal
- 👉 Arrays
- 👉 Functions
- 👉 Many more...

↑
REFERENCE TYPES
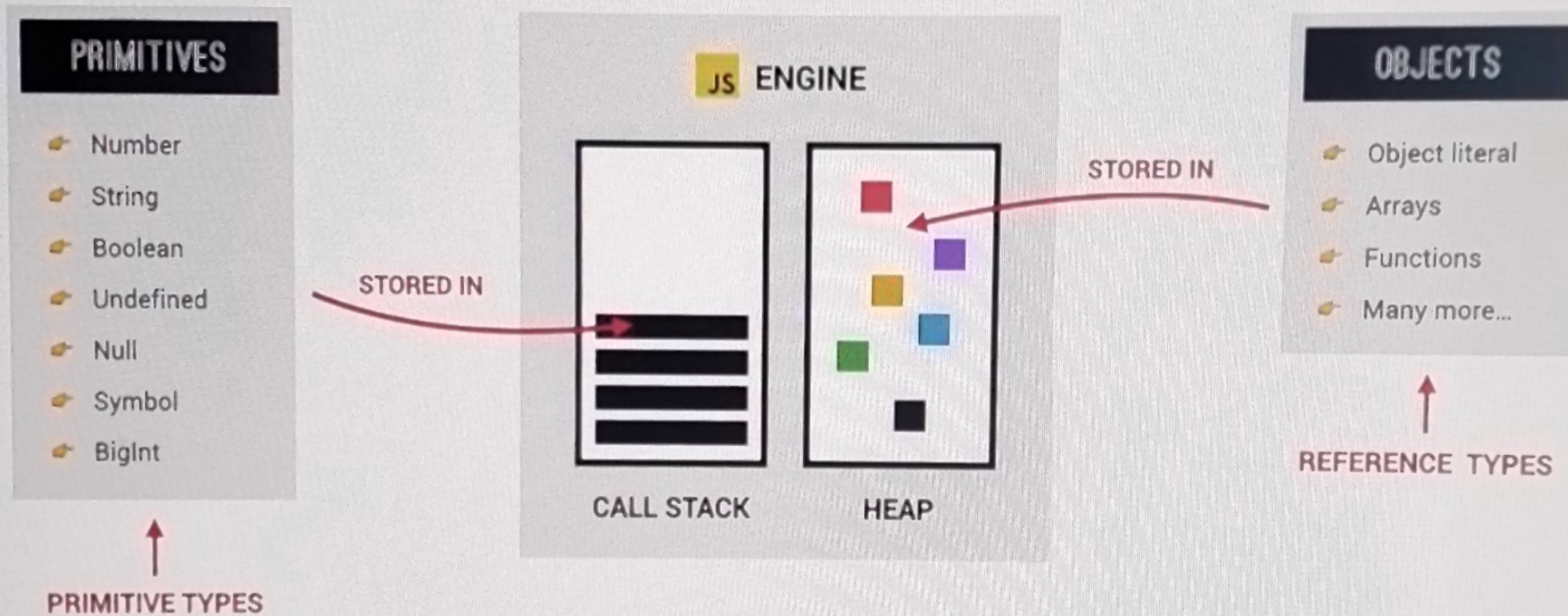
PRIMITIVE VS. REFERENCE VALUES

👉 **Primitive** values example:

```
let age = 30;
let oldAge = age;
age = 31;
console.log(age); // 31
console.log(oldAge); // 30
```

👉 **Reference** values example:

```
const me = {
  name: 'Jonas',
  age: 30
};
const friend = me;
friend.age = 27;

console.log('Friend:', friend);
// { name: 'Jonas', age: 27 }

console.log('Me:', me);
// { name: 'Jonas', age: 27 }
```

No problem, because we're NOT changing the value at address 0003!

Identifier	Address	Value
age	0001	30
oldAge	0002	31
me	0003	D30F
friend		

Address	Value
D30F	{ name: 'Jonas'; age: 30; }

Reference to memory address in Heap

27

CALL STACK

HEAP