

Age:

7-12 years

Lesson duration:

90 minutes

- Introduction: Calendars/Schedules (10m)
- Part 1: On Every Beat Do (20m)
- Break (5m)
- Part 2: On Click Do (20m)
- Break (5m)
- Part 3: Explorations (20m)
- Performance/Critique (10m)

Number of students:

Up to 10.

Rationale:

Students will learn about the scheduling events and how they can be used in music and computation; they will then explore the use of on- and off-beat events in their musical compositions.

Objectives:

Students will learn about a fundamental tool in modern computing, the event handler. Students will be able to utilize events in the creation of compositions.

LESSON

Introduction:

Begin by asking students to sit in a circle and explain that in today's lesson they are going to learn about events.

Start by discussing how people use calendars and schedules. Do you do something different on weekdays than weekends? Do you do something different during math class than gym class? Do you do something different on your birthday.

Next, have the students practice a simple 1 2 3 4 beat. Have one student clap on beat 2. See if they can make the connection between beat and scheduling events.

Part 1:

A. Drum machines

- 1. Ask the students to use the Rhythm Maker to create a beat and rhythm.
- 2. Have them export their beat and rhythm into two drum machines.
- 3. Drag Mouse name blocks from the Ensemble palette and give each machine a name.

B. On every beat do

- 4. Have the students drag the On-every-beat-do block from the Meter palette.
- 5. Have them define an action.
- 6. Have put that block at the start of the rhythm machine.
- 7. Have them guess what they might do; the action will be run for each beat.
- 8. Explore and make observations.

Break

Part 2

A. On Event Do

- 1. Have the students drag a On-event-do block from the Action palette.
- 2. Have the students drag a Click block from the Sensor palette.
- 3. Use click as the "event".
- 4. Create a new action, "action1".
- 5. Use "action1" as the "do".
- 6. Have them guess what they might do; the action will be run for each beat.
- 7. Explore and make observations.

Break

Part 3:

Explorations

1. Enjoy

Performance/Critique:

- 1. Have each student perform their composition.
- 2. Engage in a discussion about events. How else can you use them? What are some ways to use events than might be fun?

Key events:

- Introduction of key concepts- events and actions
- The use of event blocks to trigger events
- Use actions as event handlers

Materials:

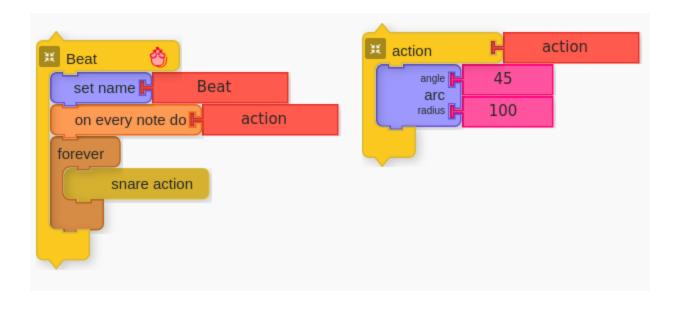
Music Blocks software

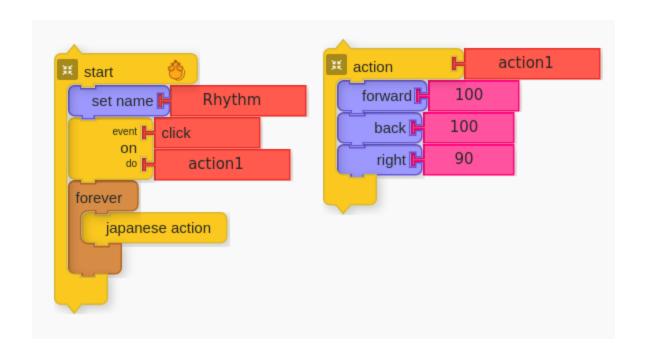
Assessment:

- Observe participation.
- Examine the code.
- Do the students use event blocks? actions?











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