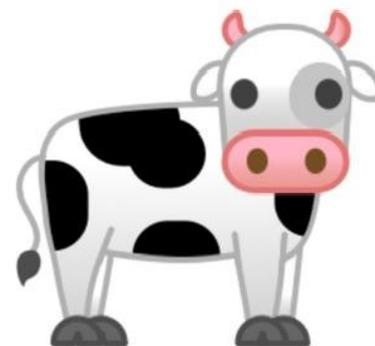




Fangspiel



mit OctoStudio



Heute



Spiel programmieren in der
App OctoStudio



Das Spiel

- Gegenstände fallen an zufälliger Stelle von oben runter
- Steuerung des Fängers: Kippen des Tablets
- Es soll erkannt werden, ob der Gegenstand gefangen wurde oder nicht

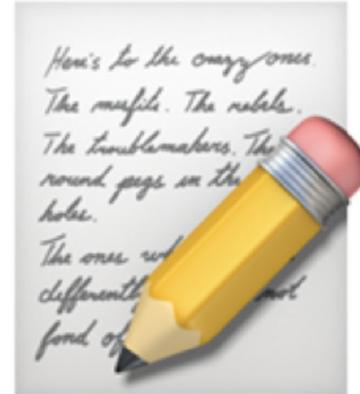


**Deine Aufgabe:
Programmiere das Spiel!**



--

**Deine Aufgabe:
Programmiere das Spiel!**



Wir brauchen einen Plan!

Der Plan

1. Fänger wählen
2. Fänger programmieren
3. Gegenstand wählen
4. Gegenstand programmieren
5. “Gefangen” erkennen und reagieren
6. “Daneben” erkennen und reagieren



App “OctoStudio” starten



Tipp: Arbeite im Querformat

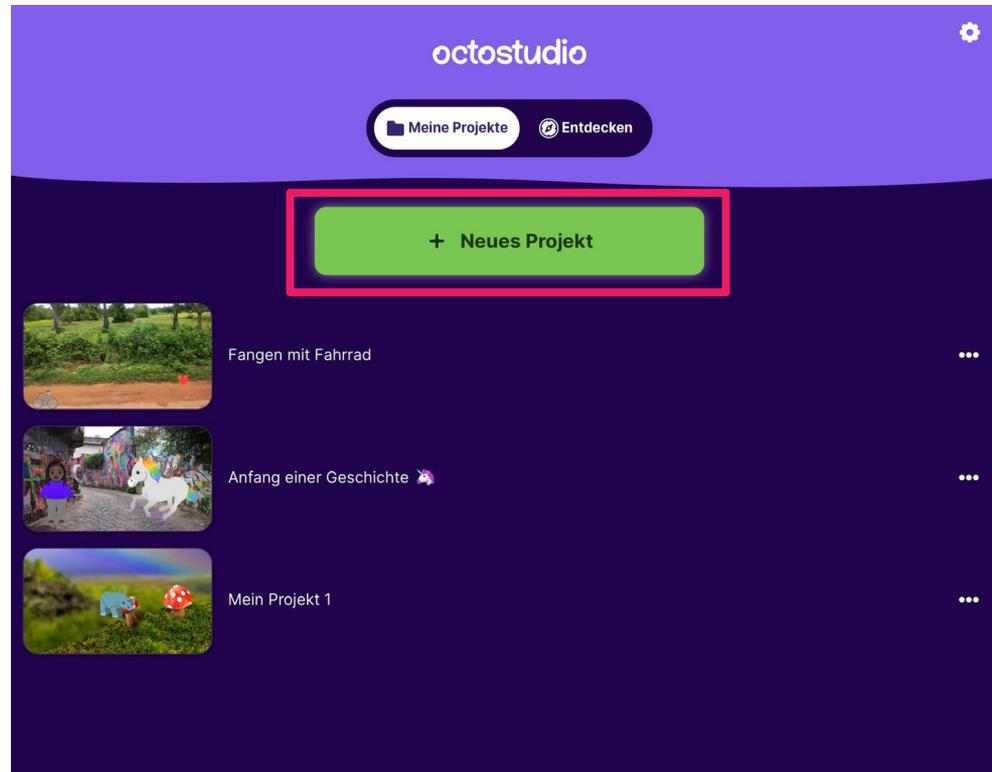
The image shows two side-by-side screenshots of the octostudio application interface. The left screenshot shows the main dashboard with a purple header containing the 'octostudio' logo and a gear icon (highlighted with a red box). Below the header are buttons for 'Meine Projekte' and 'Entdecken', and a large green button for '+ Neues Projekt'. A list of projects is visible below, including 'Fangen mit Fahrrad', 'Anfang einer Geschichte', and 'Mein Projekt 1'. The right screenshot shows the settings menu with options for 'Einstellungen', 'Datenschutz', and 'Über'. The 'Sprache' (Language) section is set to 'Deutsch'. The 'Bildschirmlayout' (Screen layout) section shows two options: 'Hochformat' (Portrait) and 'Querformat' (Landscape). The 'Querformat' option is highlighted with a red box and has a checkmark, indicating it is the selected layout.

Der Plan

1. **Fänger wählen**
2. Fänger programmieren
3. Gegenstand wählen
4. Gegenstand programmieren
5. “Gefangen” erkennen und reagieren
6. “Daneben” erkennen und reagieren

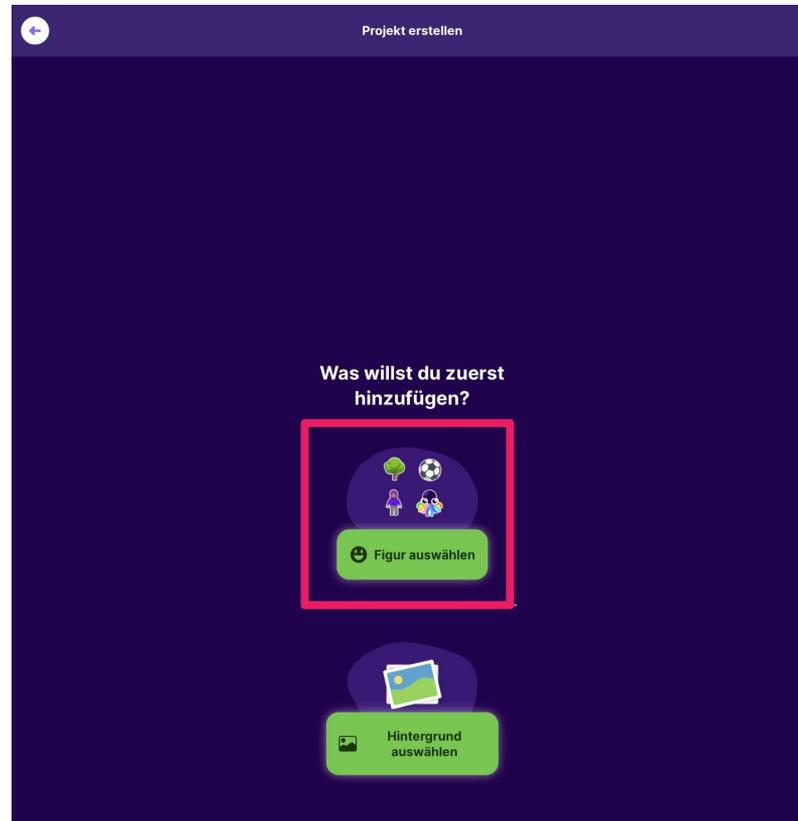


Neues Projekt starten

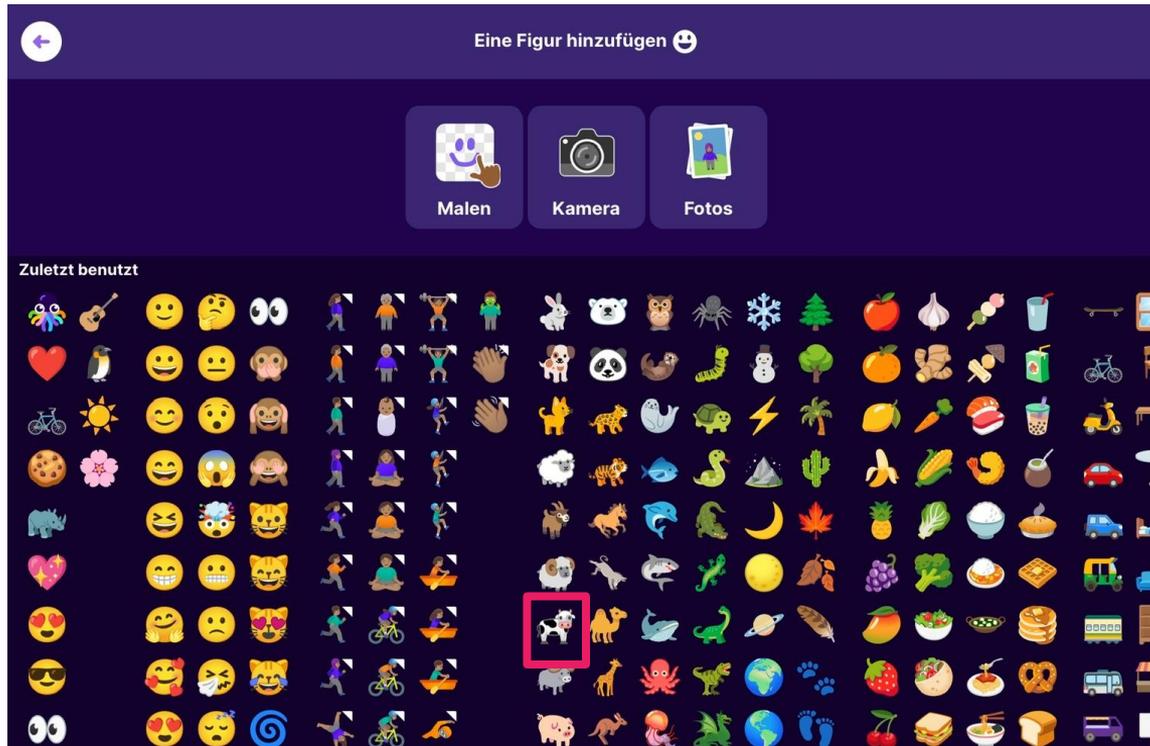


Zuerst Figur auswählen

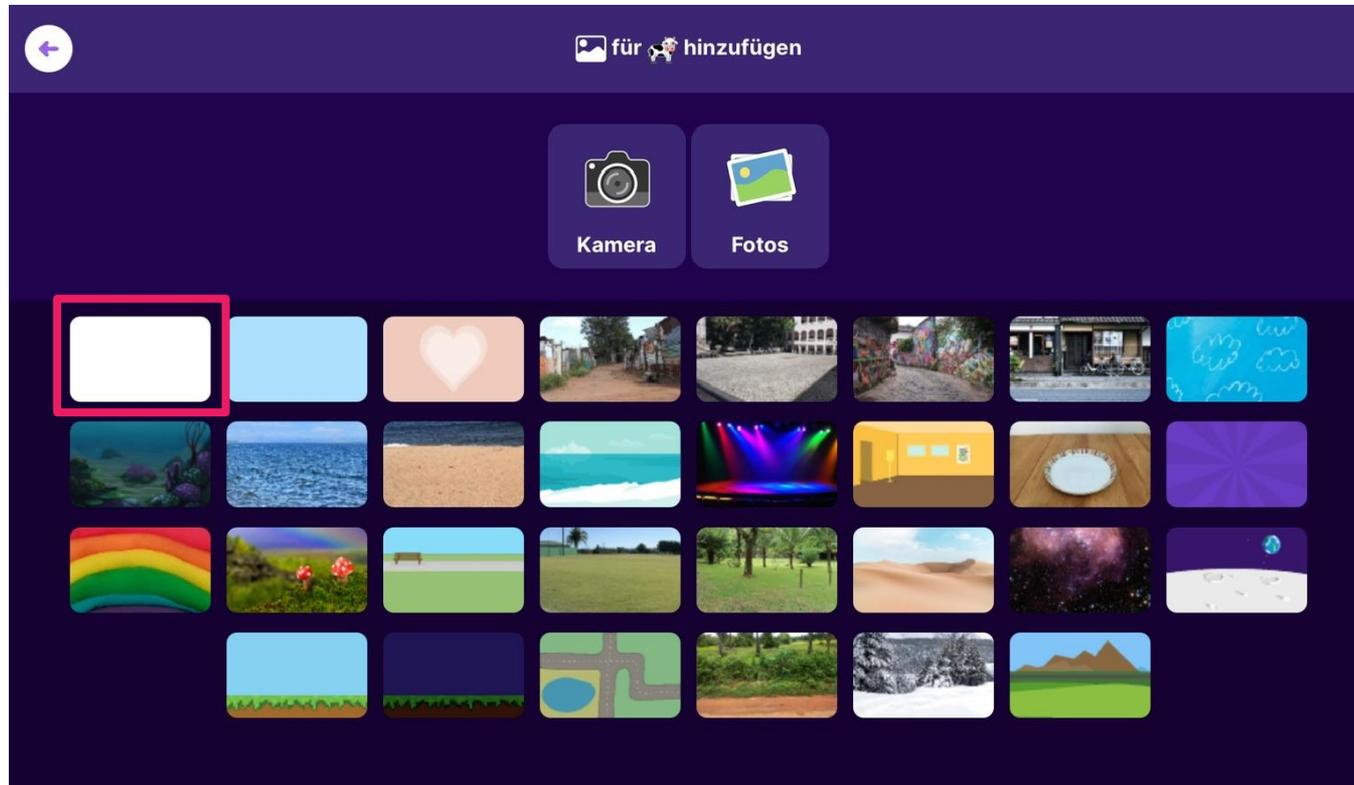
— — —



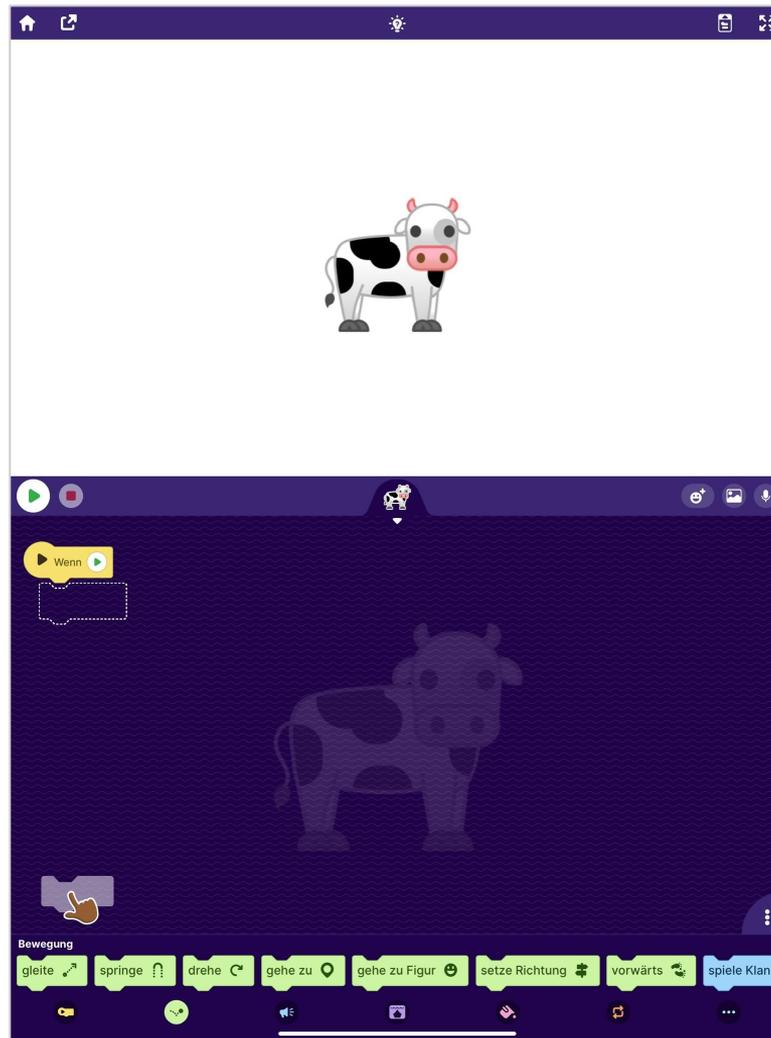
Zum Beispiel die Kuh wählen



Hintergrund bleibt weiß - erstmal

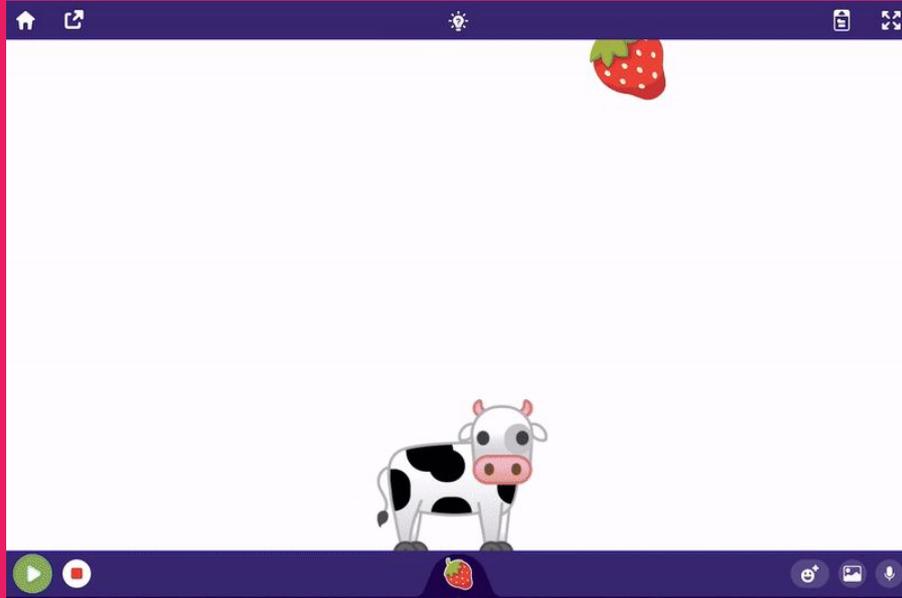


Die Kuh ist im Spiel!

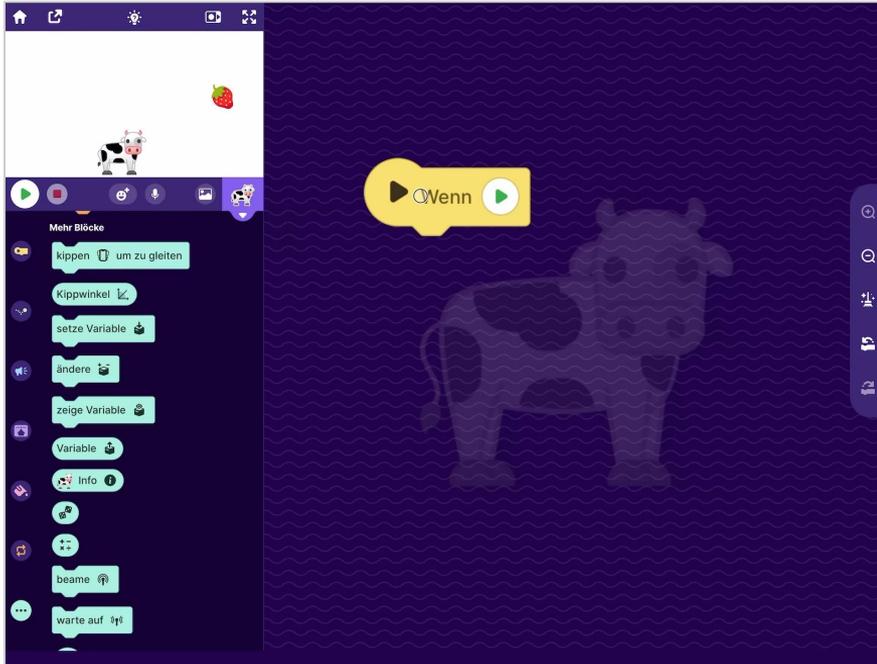


Der Plan

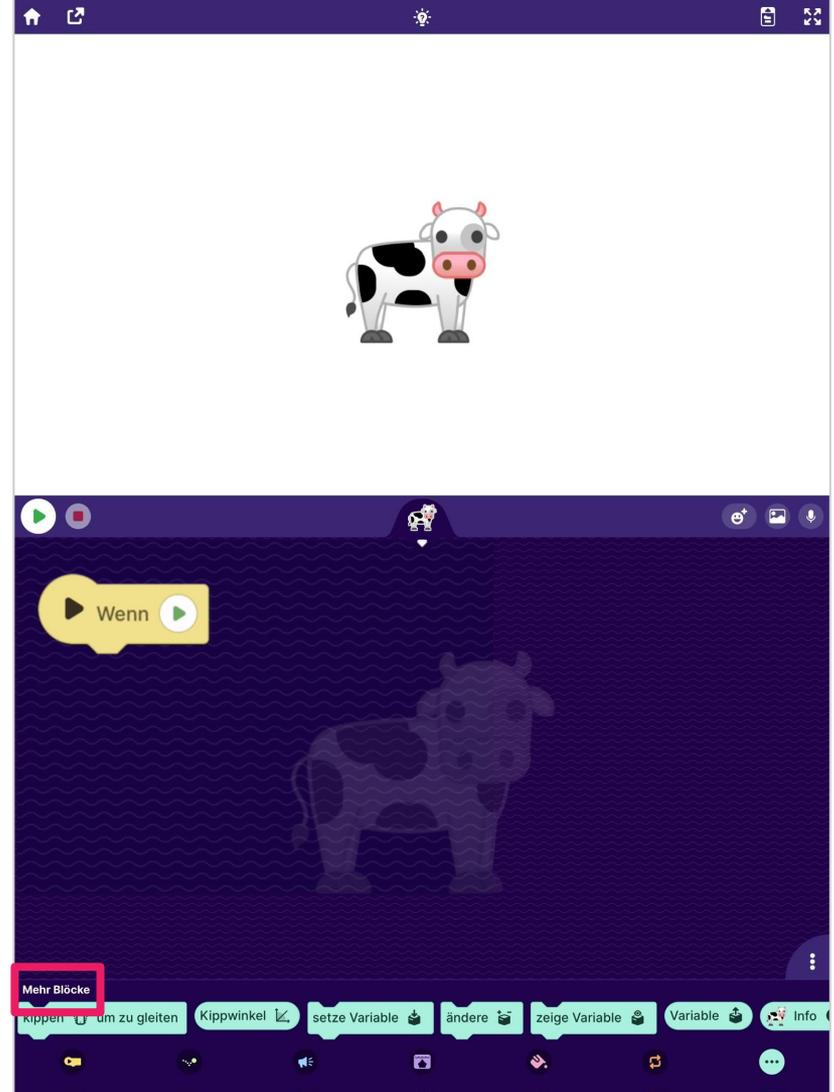
1. Fänger wählen
2. **Fänger programmieren**
3. Gegenstand wählen
4. Gegenstand programmieren
5. “Gefangen” erkennen und reagieren
6. “Daneben” erkennen und reagieren



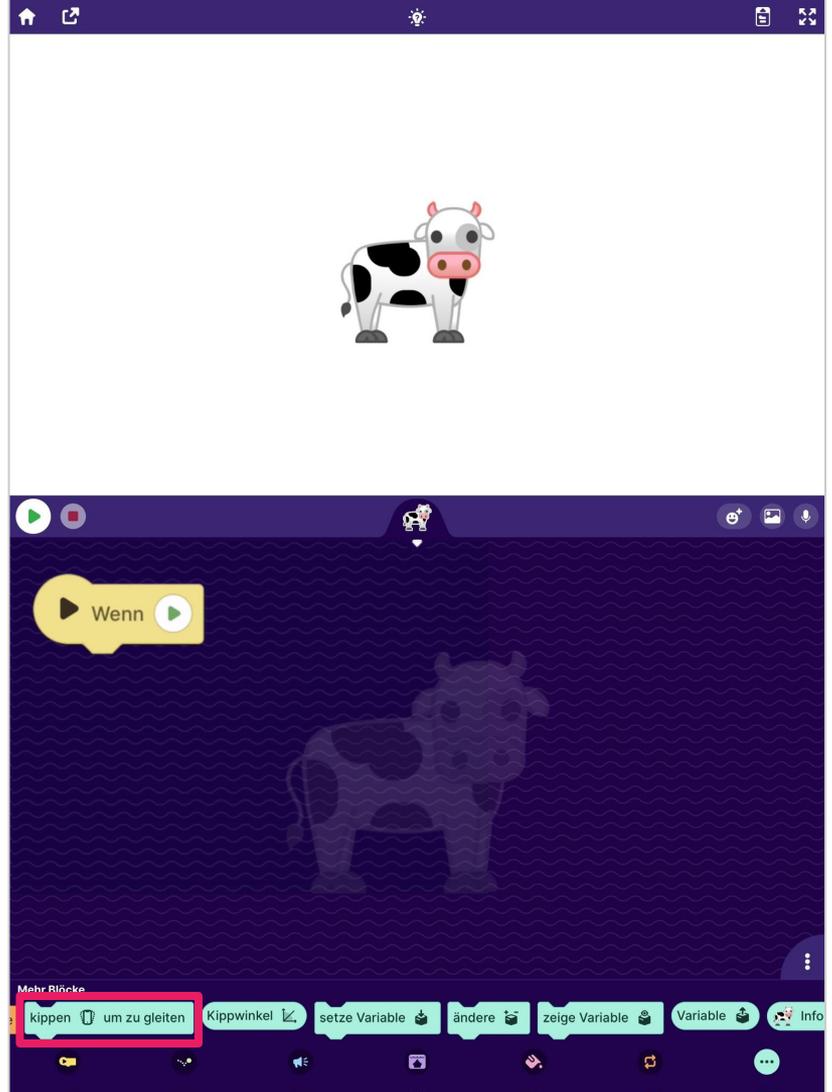
Zu “Mehr Blöcke” wechseln



Auf den folgenden Folien sind öfter Quer- und Hochformat zu sehen.

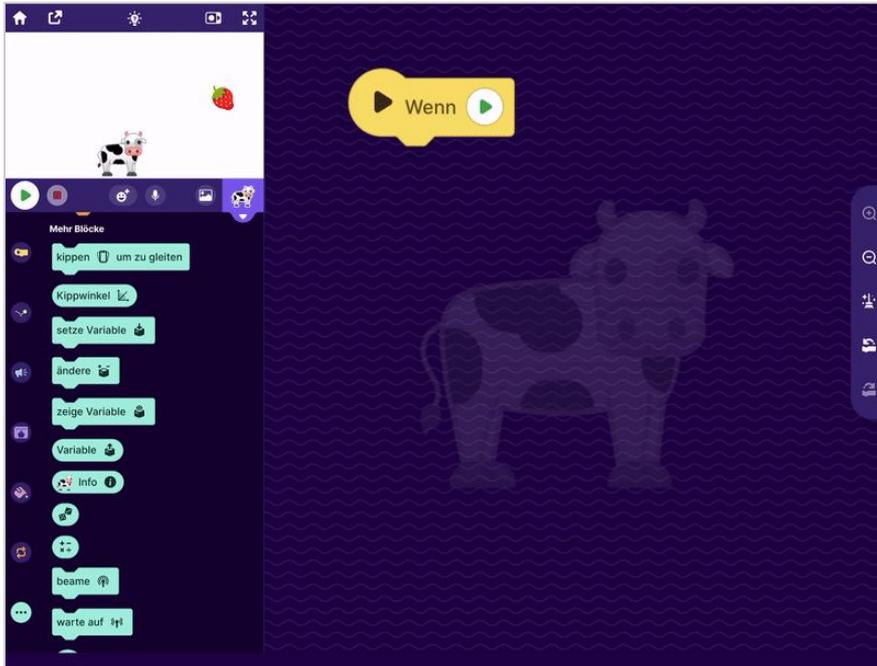


“Kippen” auswählen

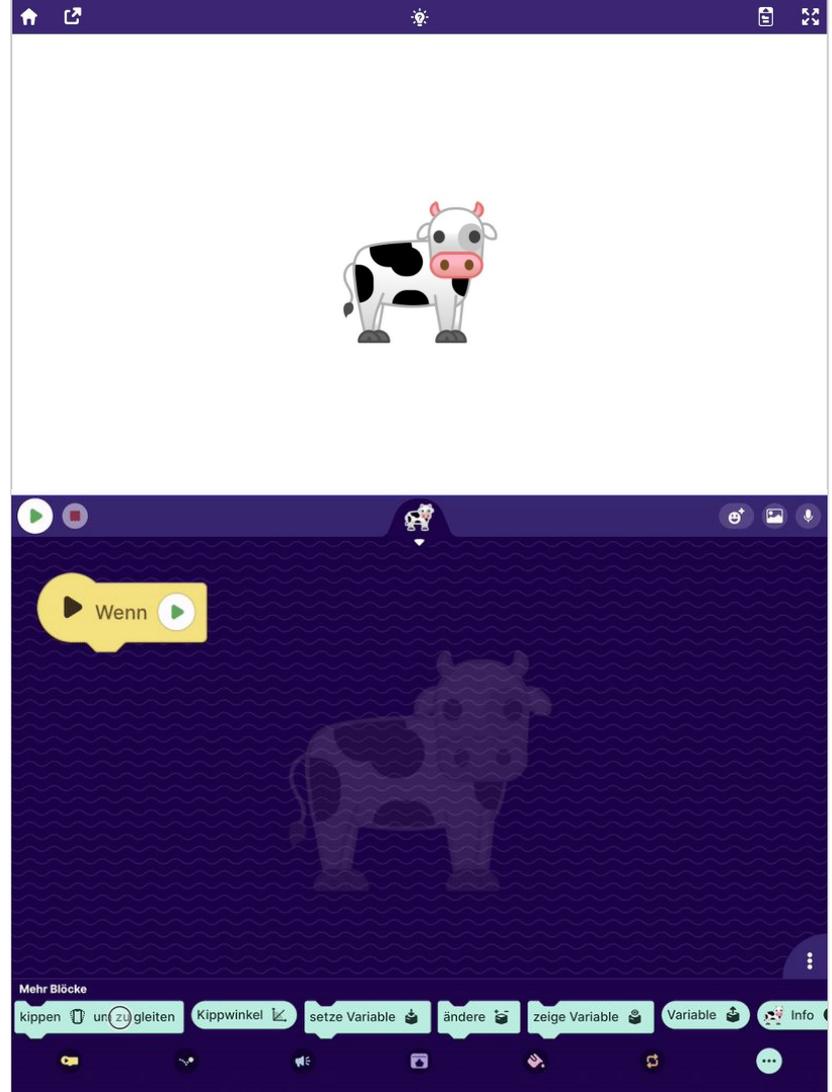


The image shows a screenshot of a Scratch project. The top half displays a white stage with a cow sprite. The bottom half shows the script area with a yellow 'Wenn' (When) block. Below it, a 'kippen' (tilt) block is highlighted with a red box. The 'kippen' block has a dropdown menu open, showing 'um zu gleiten' (to slide) as the selected option. Other blocks in the script area include 'Kippwinkel' (Tilt angle), 'setze Variable' (set Variable), 'ändere' (change), 'zeige Variable' (show Variable), and 'Variable' (Variable).

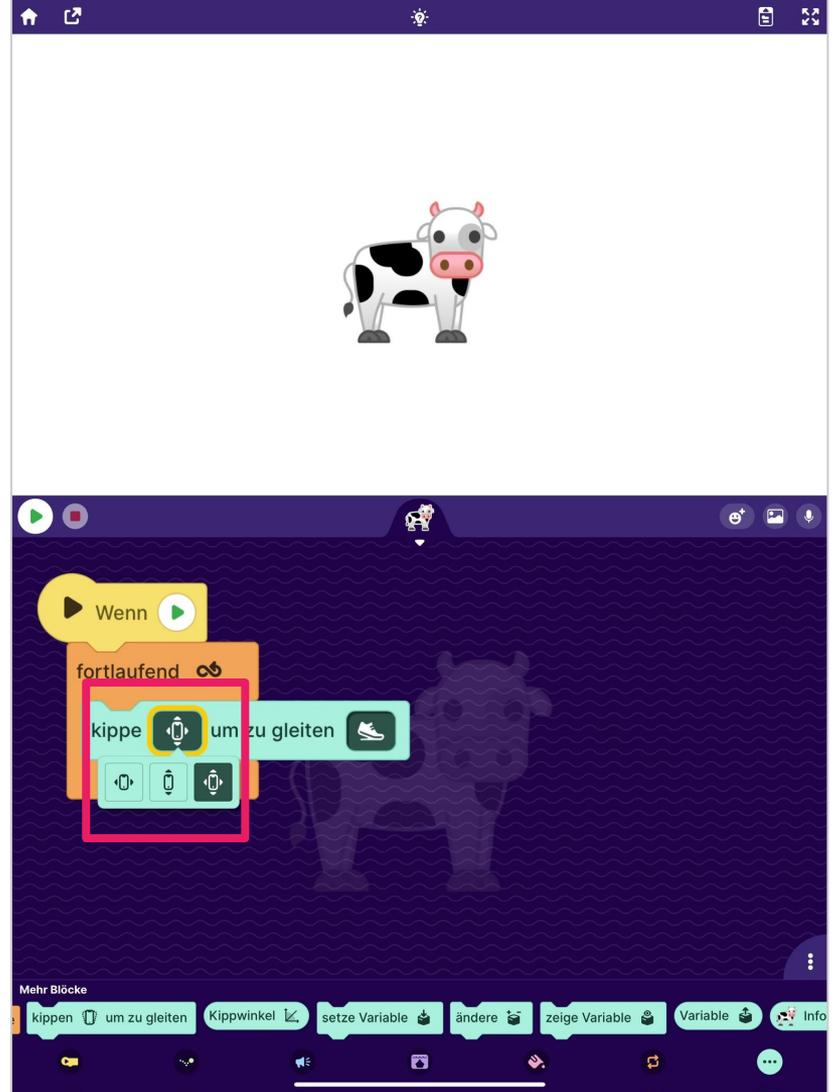
“Kippen” auswählen



Block “fortlaufend” ist automatisch dabei

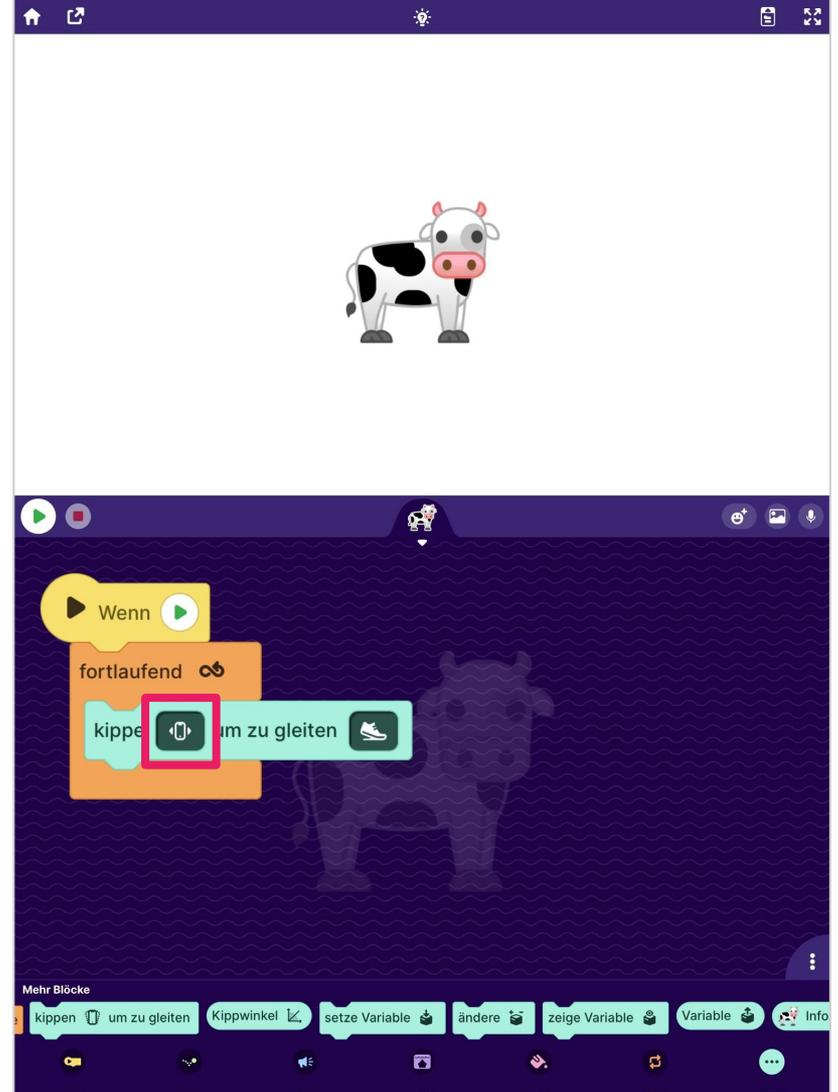


Parameter antippen



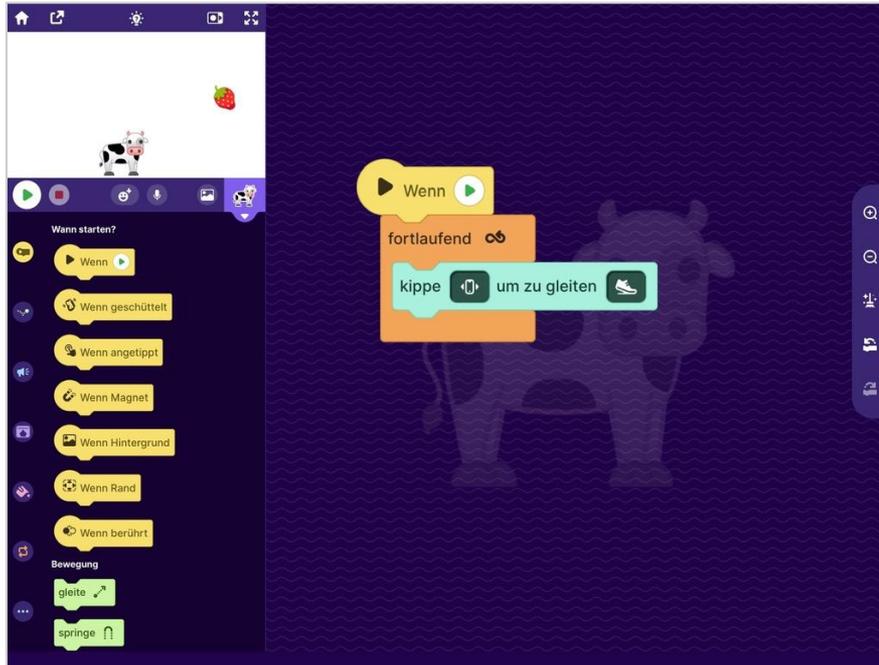
The image shows a Scratch project interface. At the top, a cow character is displayed on a white background. Below it, the script area is visible, featuring a yellow 'Wenn' (When) block, an orange 'fortlaufend' (forever) loop block, and a green 'kippe um zu gleiten' (tilt to glide) block. The 'kippe um zu gleiten' block is highlighted with a red rectangle, and its 'kippe' (tilt) parameter is highlighted with a yellow circle. The bottom of the screen shows a toolbar with various blocks like 'kippen', 'um zu gleiten', 'Kippwinkel', 'setze Variable', 'ändere', 'zeige Variable', 'Variable', and 'Info'. The page number '19' is visible in the bottom right corner.

“Kippe” auf Rechts-Links einschränken

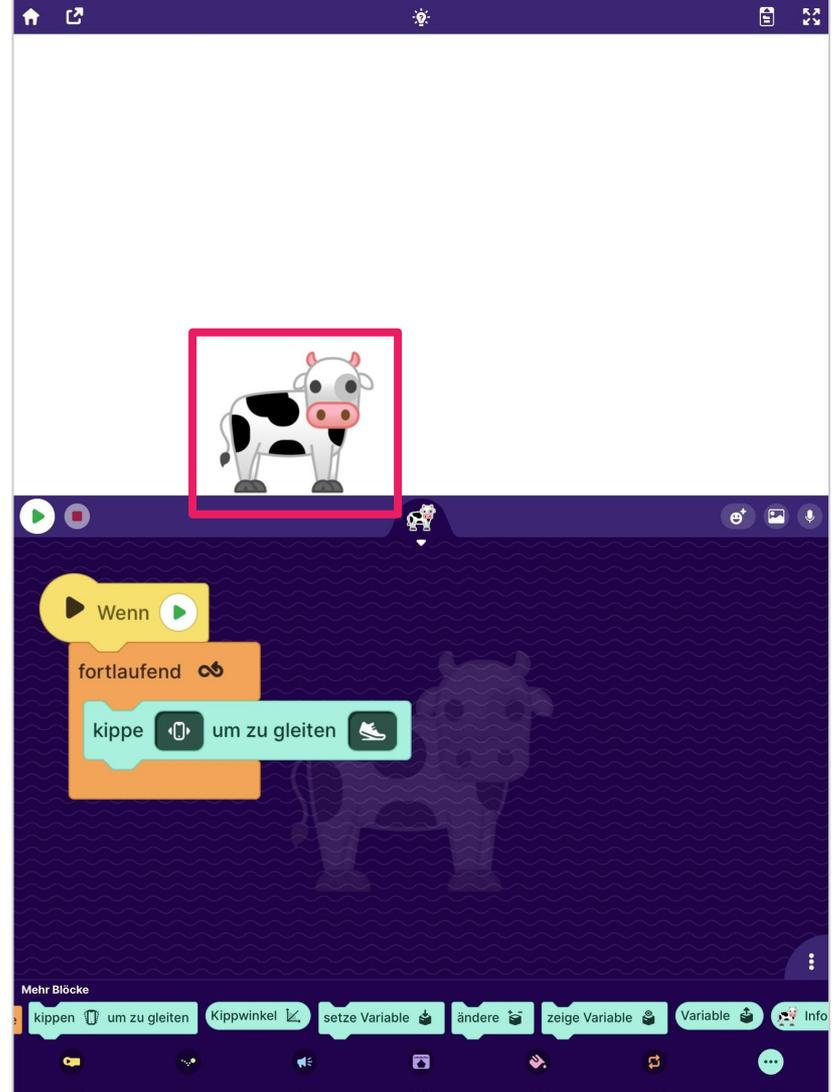


The image shows a Scratch project interface. At the top, a cow sprite is displayed on a white background. Below it, a script area is visible with a yellow 'Wenn' (When) block, an orange 'fortlaufend' (forever) loop block, and a light blue 'kippe um zu gleiten' (tilt to slide) block. The 'kippe' block is highlighted with a red square. The 'um zu gleiten' block has a small icon of a shoe. At the bottom, a 'Mehr Blöcke' (More Blocks) palette is visible, showing various blocks including 'kippen um zu gleiten', 'Kippwinkel', 'setze Variable', 'ändere', 'zeige Variable', and 'Variable'. The page number '20' is visible in the bottom right corner.

Kuh nach unten

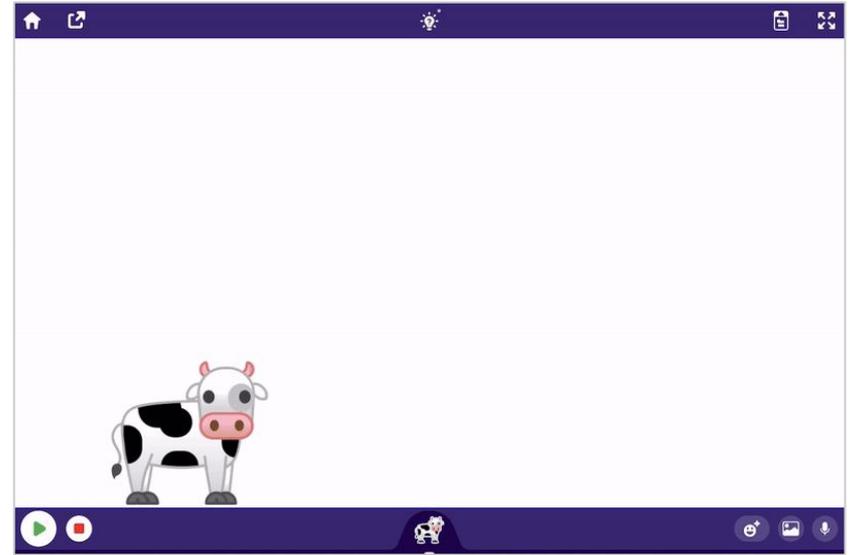


The image shows the Scratch editor interface. On the left, a small stage displays a cow sprite and a strawberry. The main workspace has a dark purple background with a faint cow silhouette. A script block is attached to the cow sprite, consisting of a yellow 'Wenn' (When) block, an orange 'fortlaufend' (forever) loop block, and a light blue 'kippe um zu gleiten' (tilt and glide) block. The 'kippe um zu gleiten' block has a small icon of a cow and a shoe. A sidebar on the left lists various event and movement blocks.



The image shows the Scratch editor interface with the cow sprite on the stage. The cow is highlighted with a red square. The script block from the previous image is visible in the workspace. The bottom of the screen shows a 'Mehr Blöcke' (More Blocks) palette with various blocks like 'kippen um zu gleiten', 'Kippwinkel', 'setze Variable', 'ändere', 'zeige Variable', 'Variable', and 'Info'. The stage is mostly empty, with the cow sprite positioned in the upper right area.

Teste: Die Kuh folgt dem Kippen des Tablets

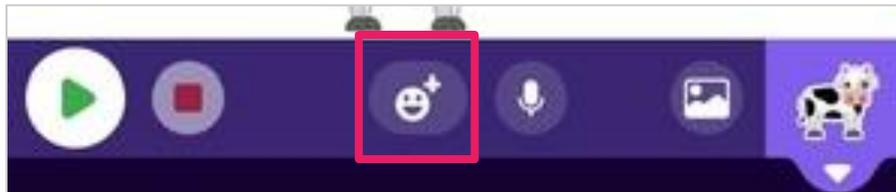
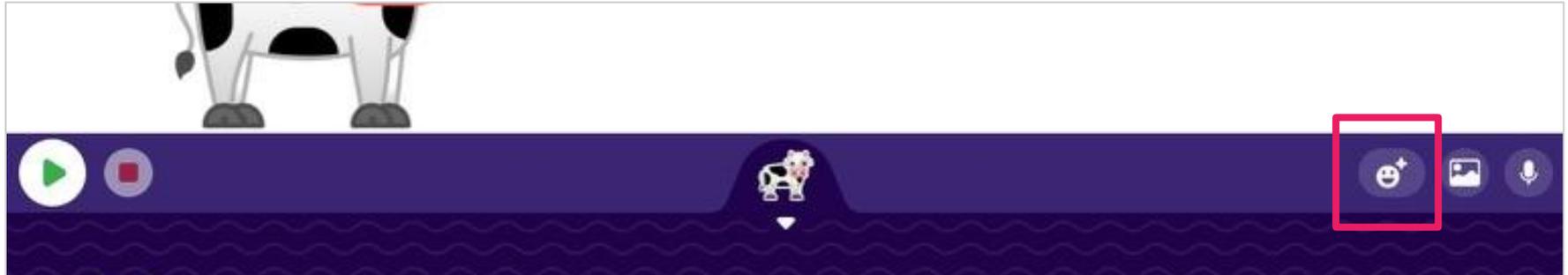


Der Plan

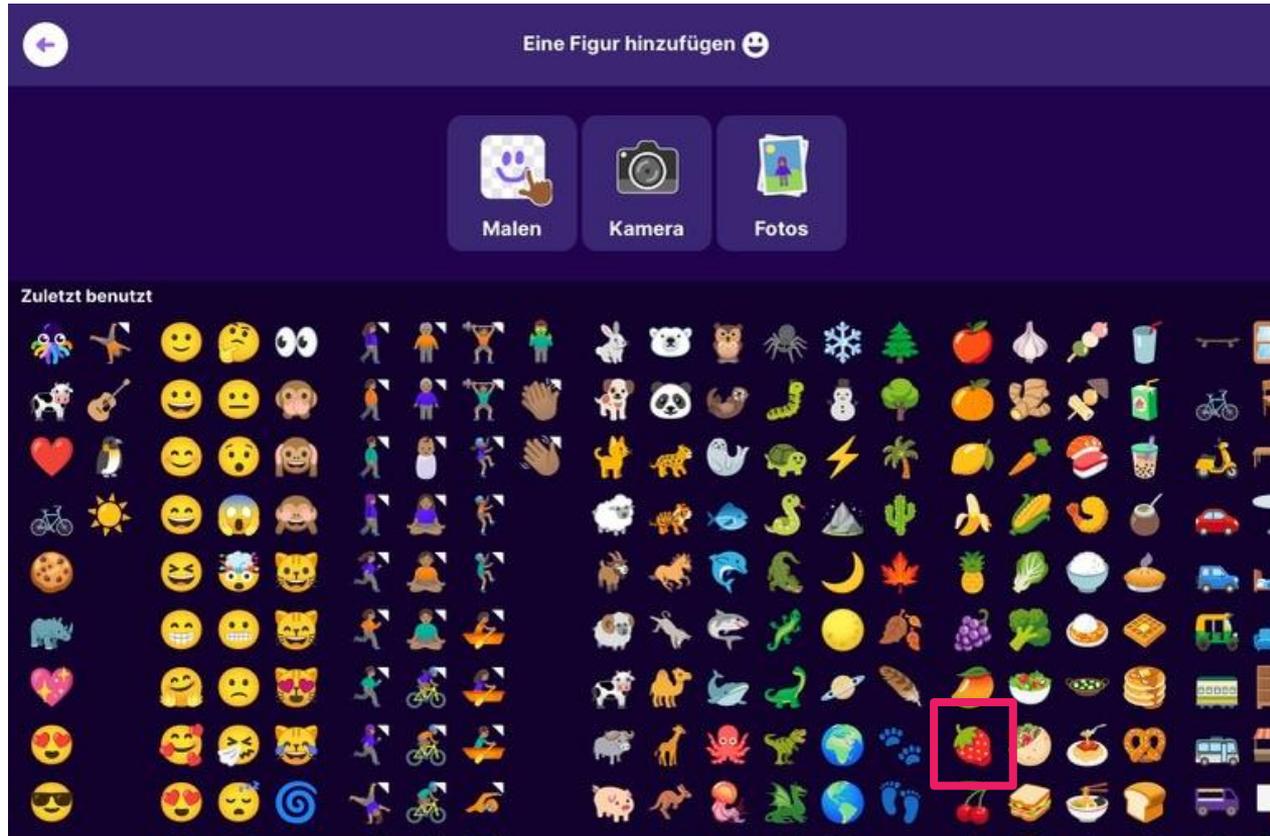
1. Fänger wählen
2. Fänger programmieren
- 3. Gegenstand wählen**
4. Gegenstand programmieren
5. “Gefangen” erkennen und reagieren
6. “Daneben” erkennen und reagieren



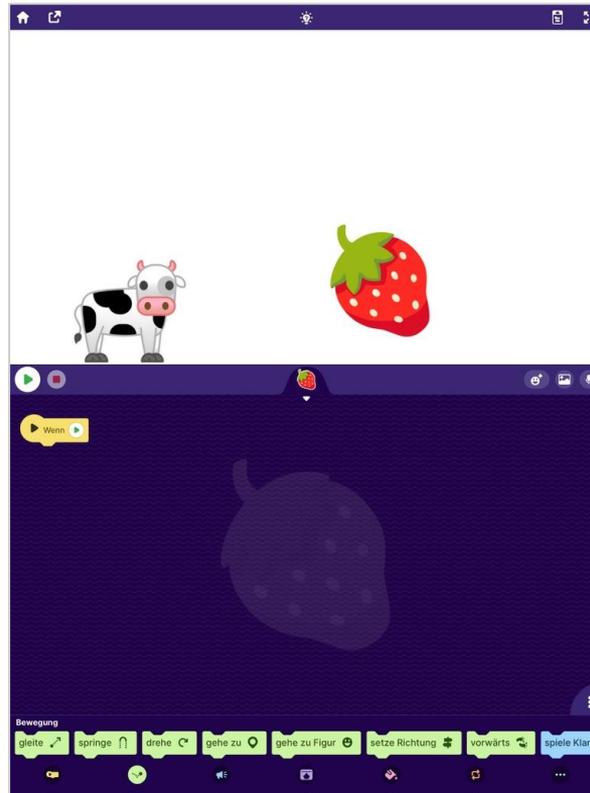
Figur für Gegenstand hinzufügen



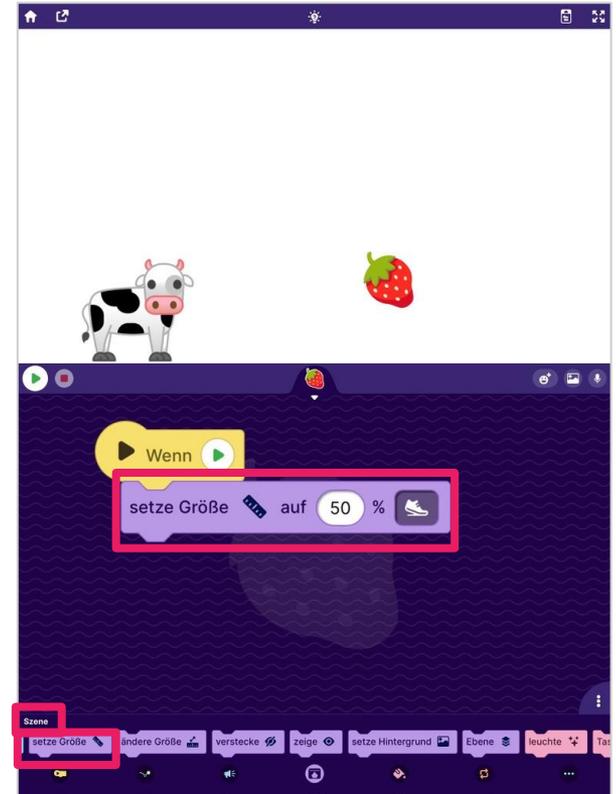
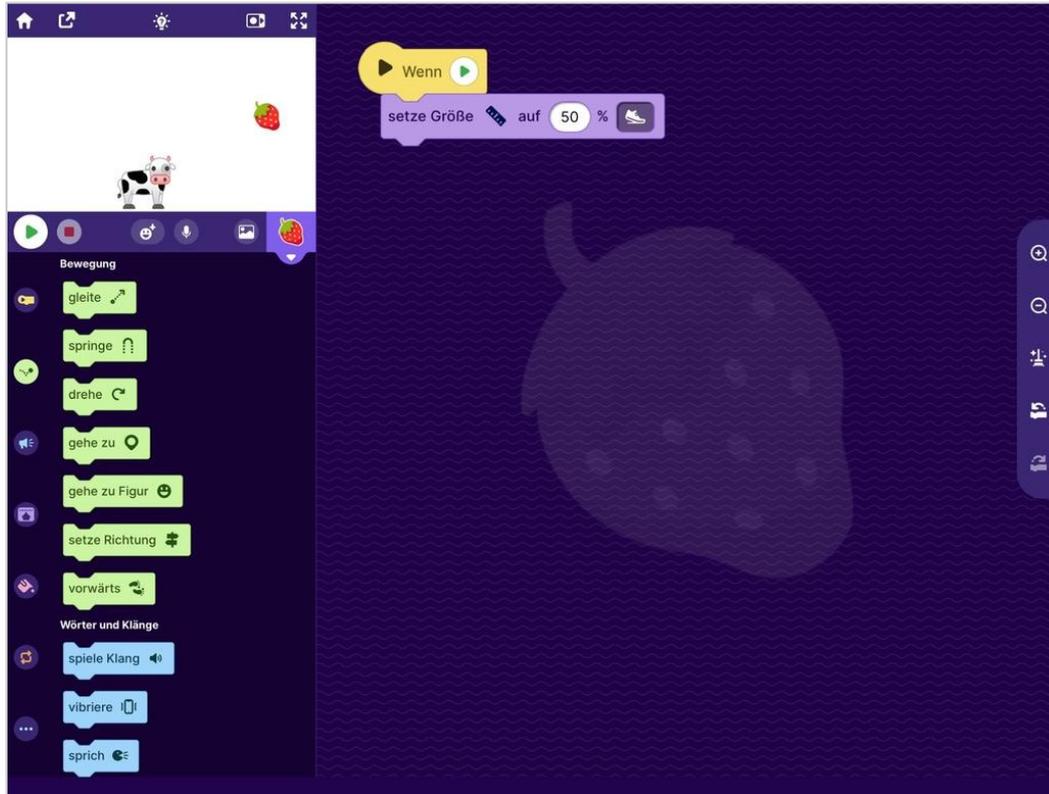
Figur aussuchen, z.B. die Erdbeere



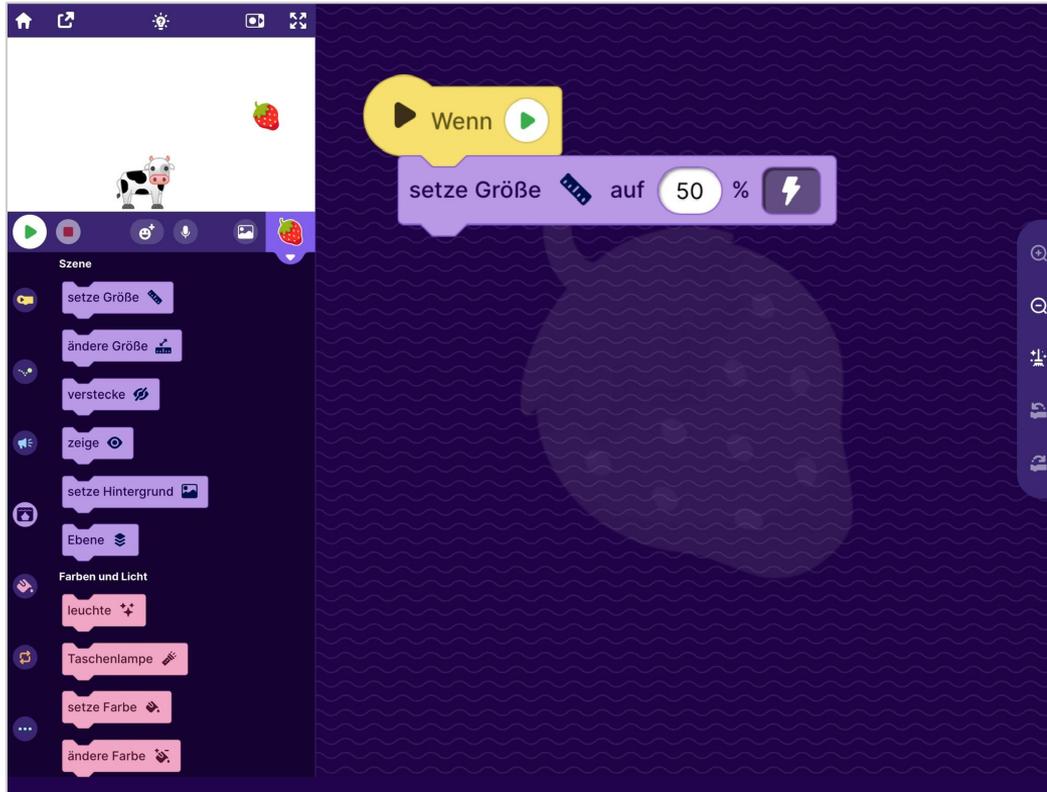
Die Erdbeere ist im Spiel



Erdbeere verkleinern



Erdbeere schnell verkleinern

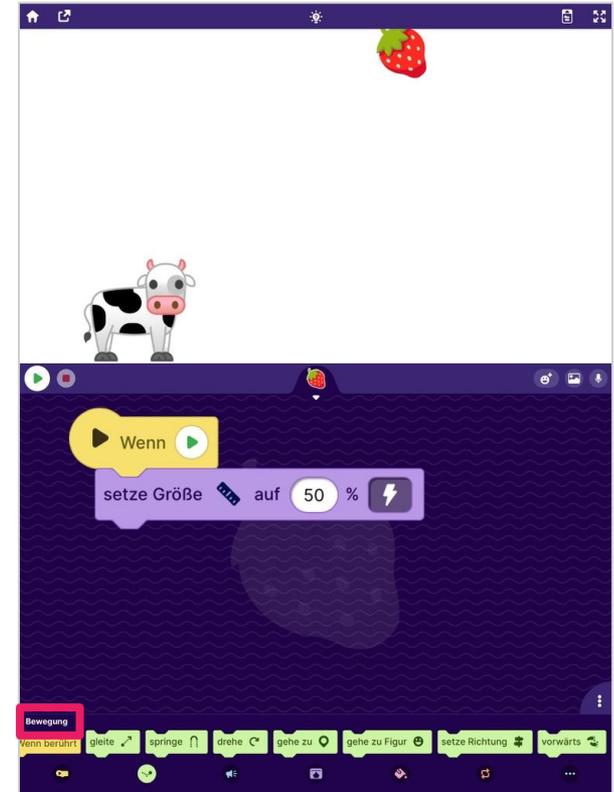
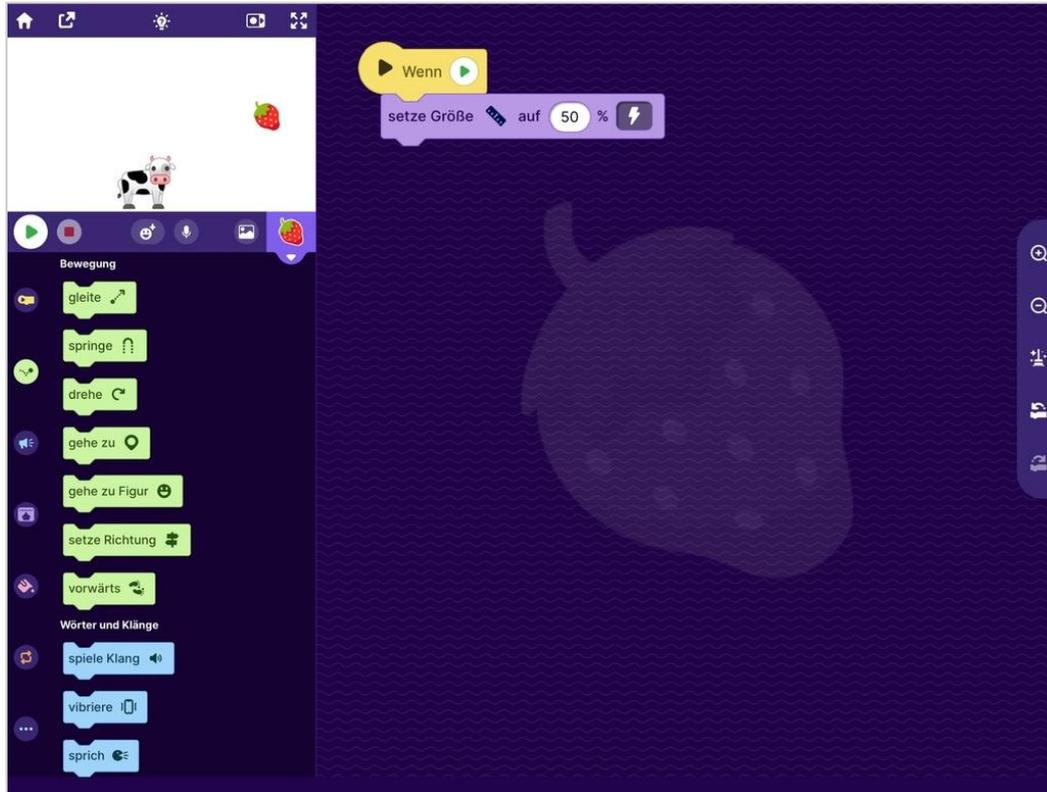


Der Plan

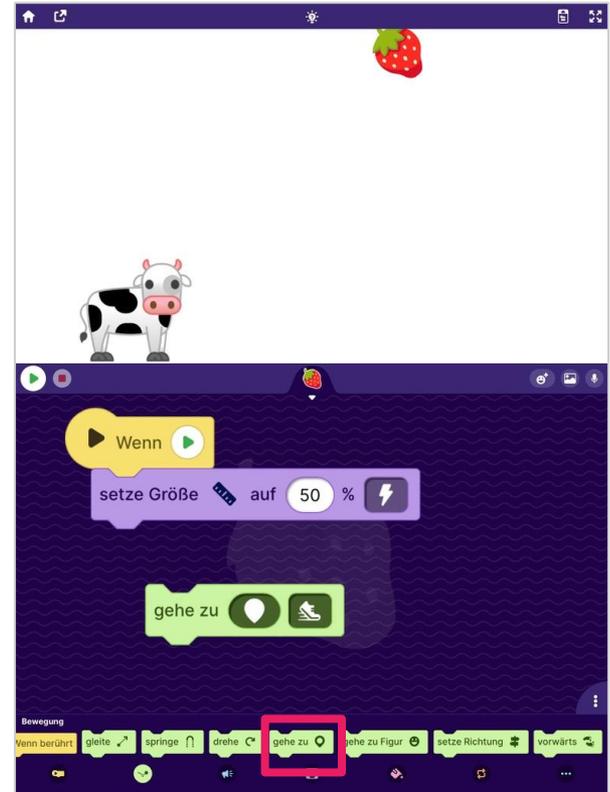
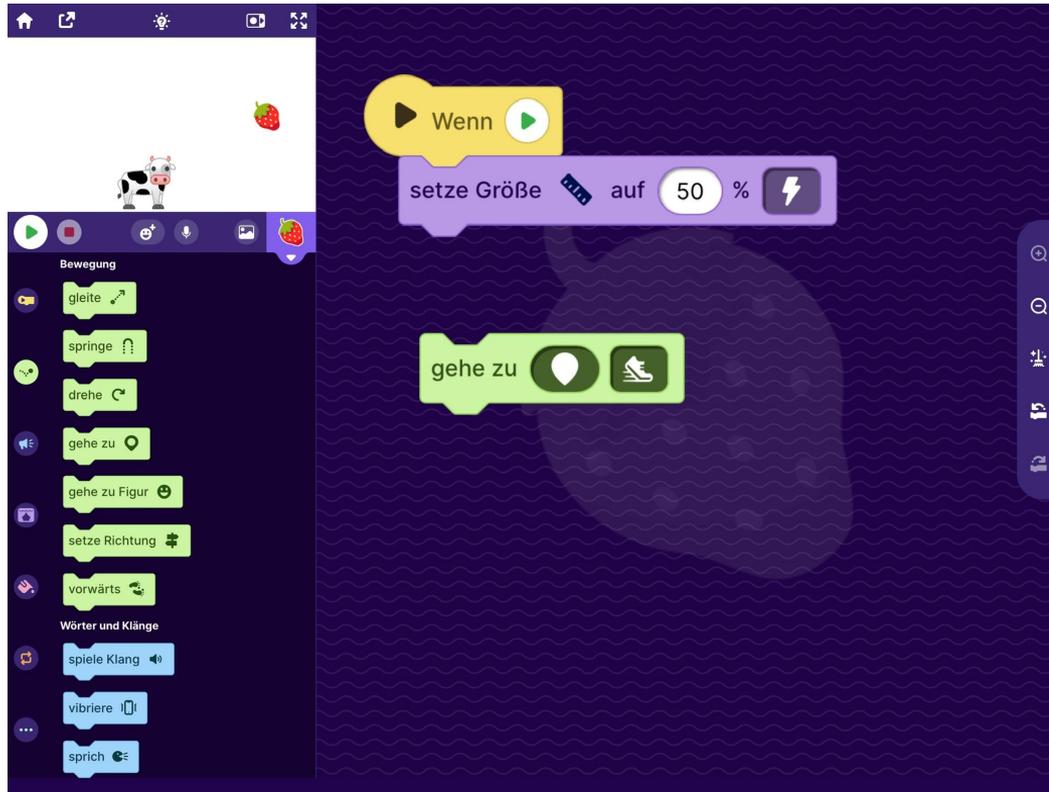
1. Fänger wählen
2. Fänger programmieren
3. Gegenstand wählen
- 4. Gegenstand programmieren**
5. “Gefangen” erkennen und reagieren
6. “Daneben” erkennen und reagieren



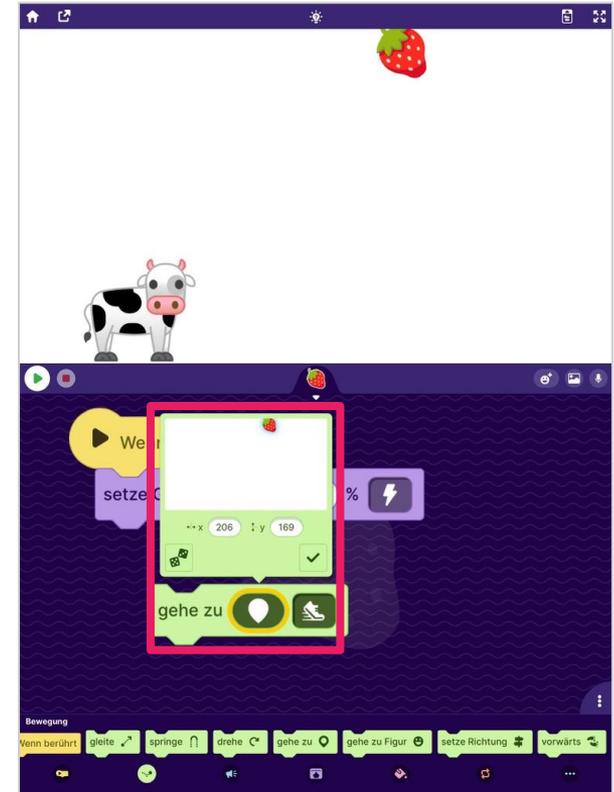
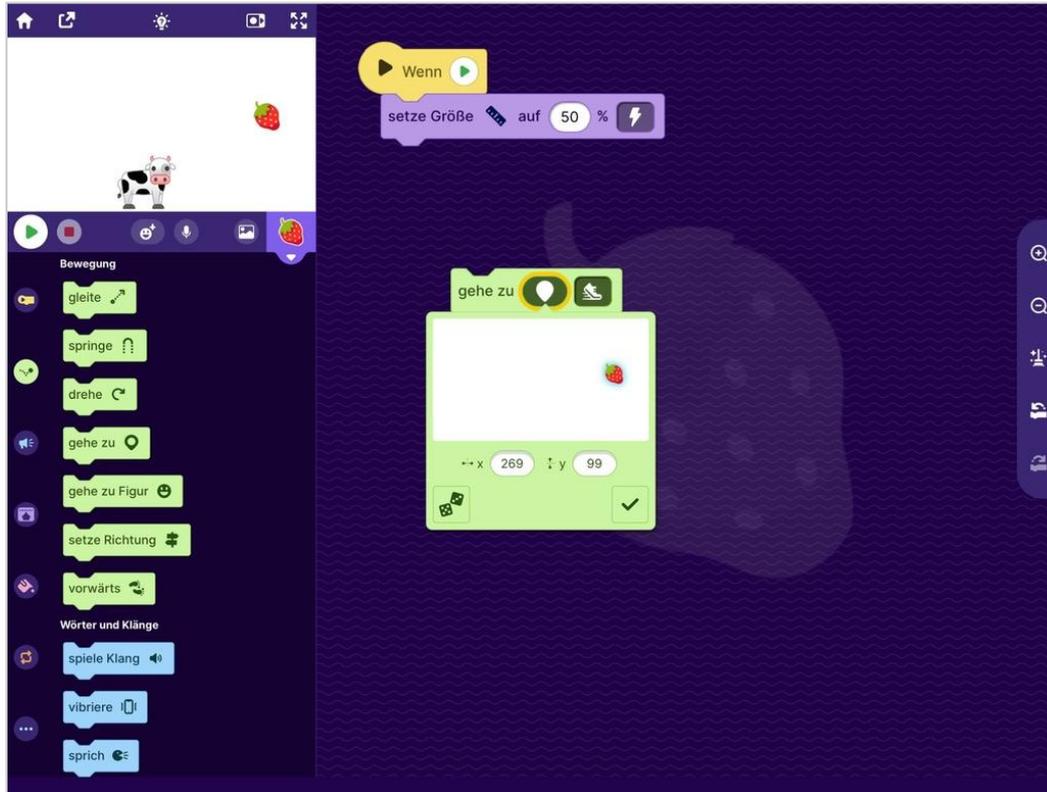
Kategorie "Bewegung"



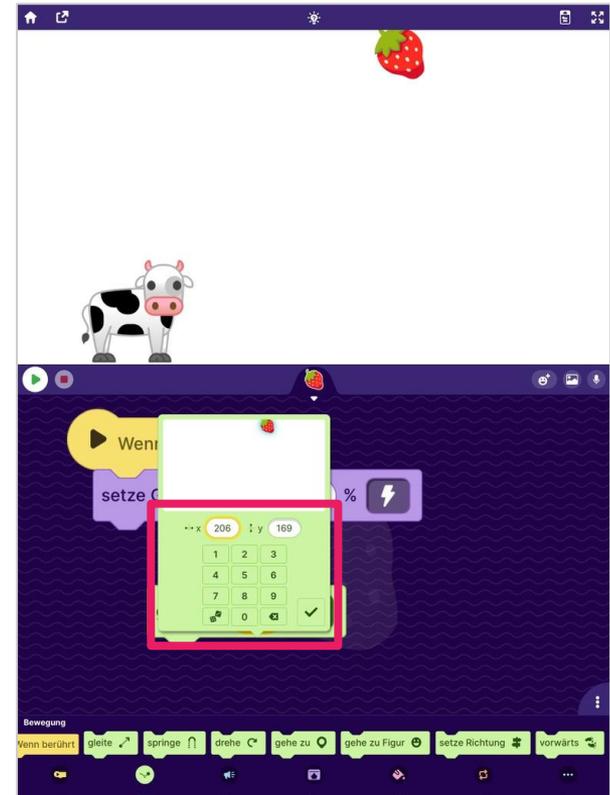
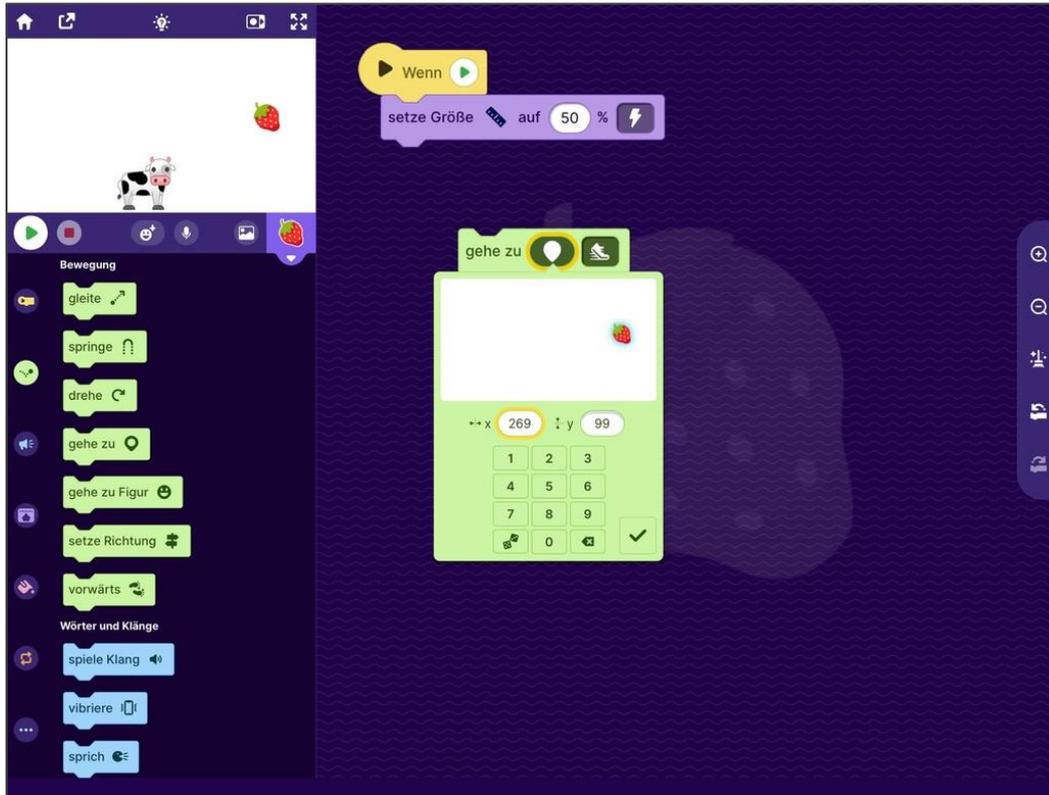
Block "Gehe zu"



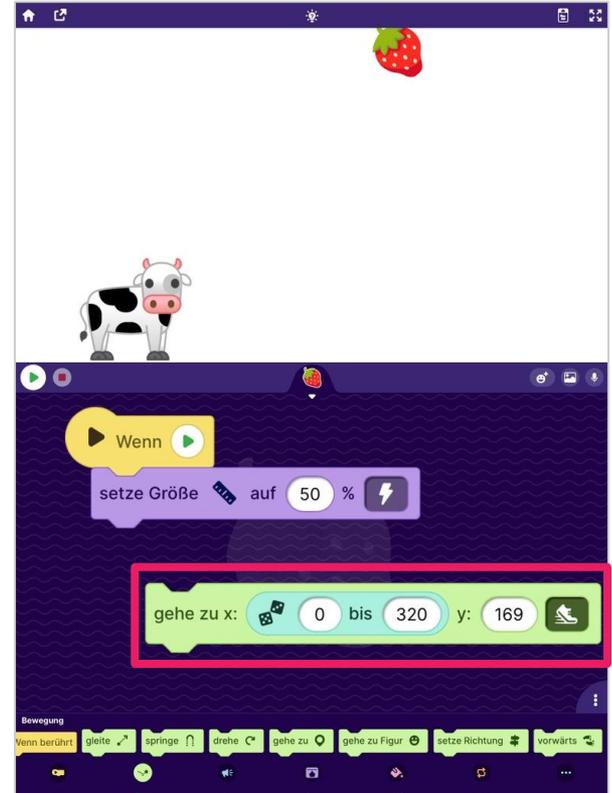
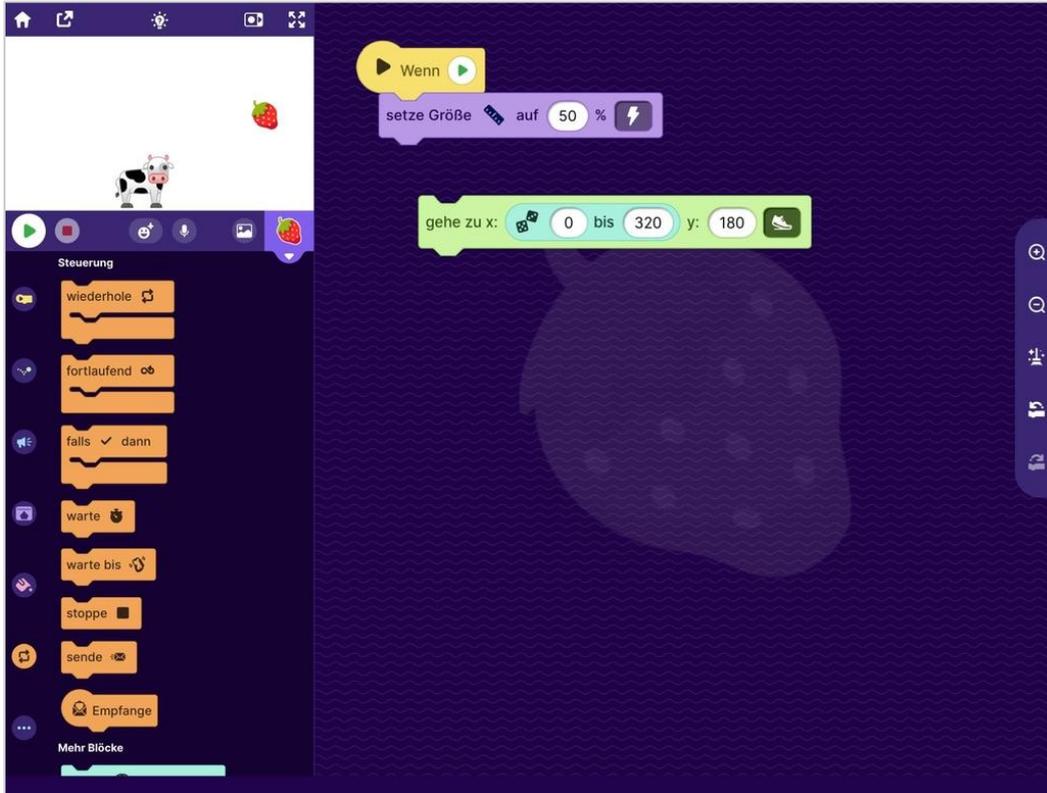
Parameter antippen



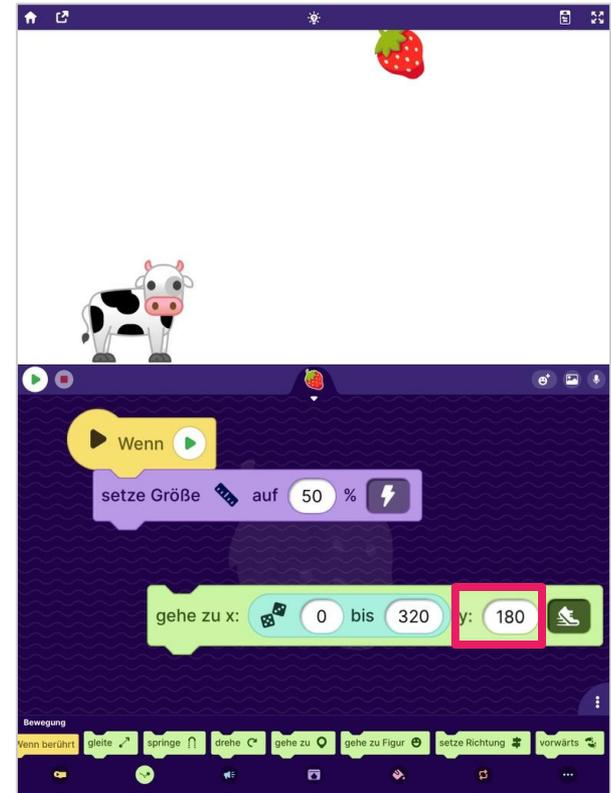
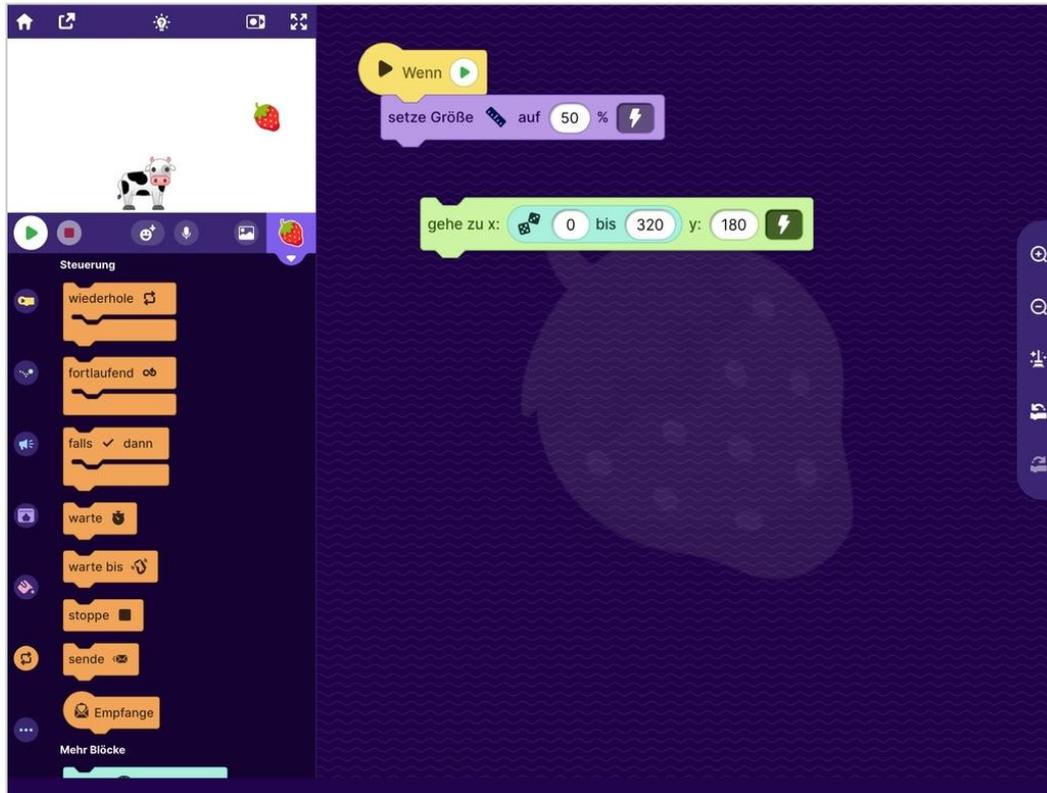
“x” antippen



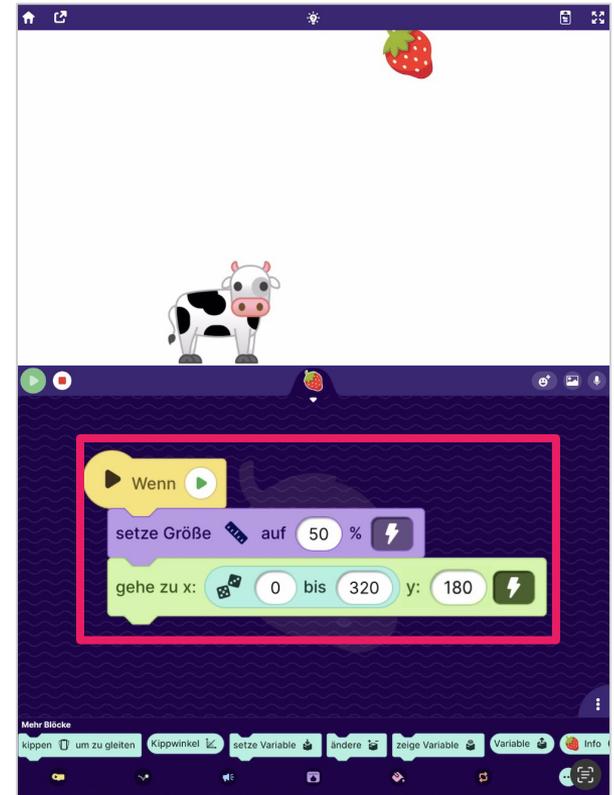
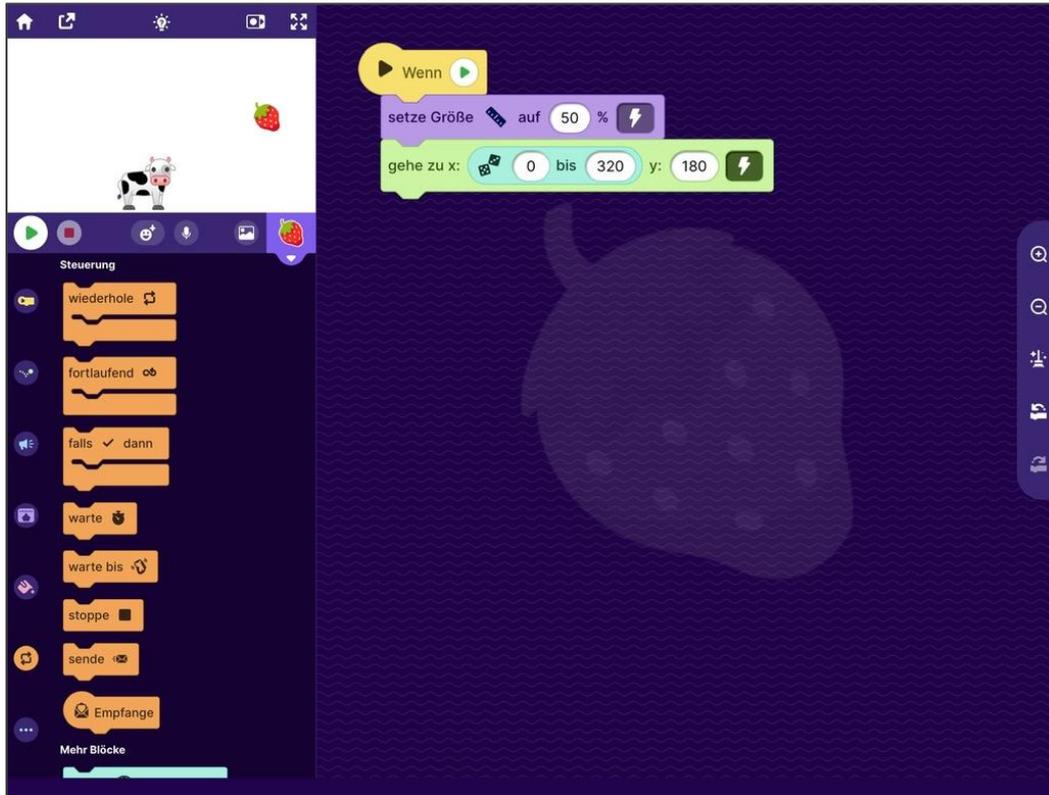
“Würfel” antippen - für zufälligen Wert



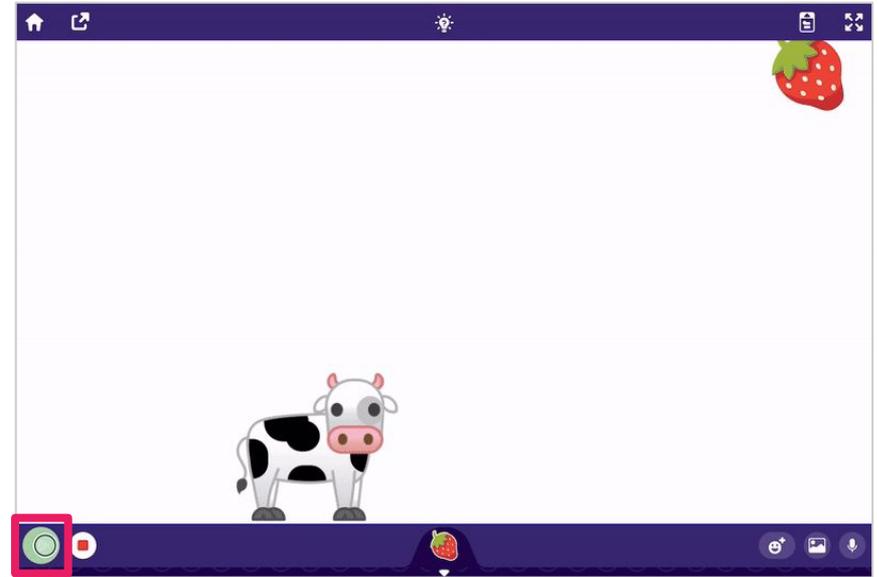
y-Wert auf 180 (ganz oben)



Block "Gehe zu" anfügen, schnell



Teste:
Die Erdbeere ist
oben an zufälliger
Position
Position

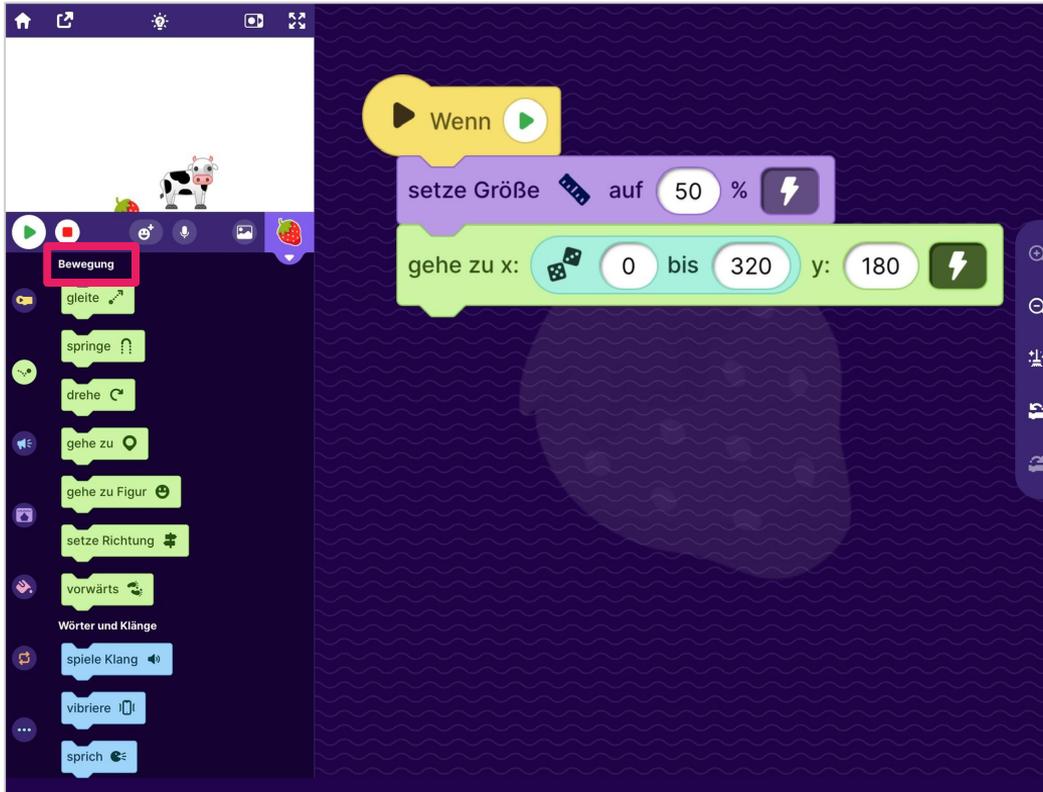


Der Plan

1. Fänger wählen
2. Fänger programmieren
3. Gegenstand wählen
- 4. Gegenstand programmieren**
5. “Gefangen” erkennen und reagieren
6. “Daneben” erkennen und reagieren



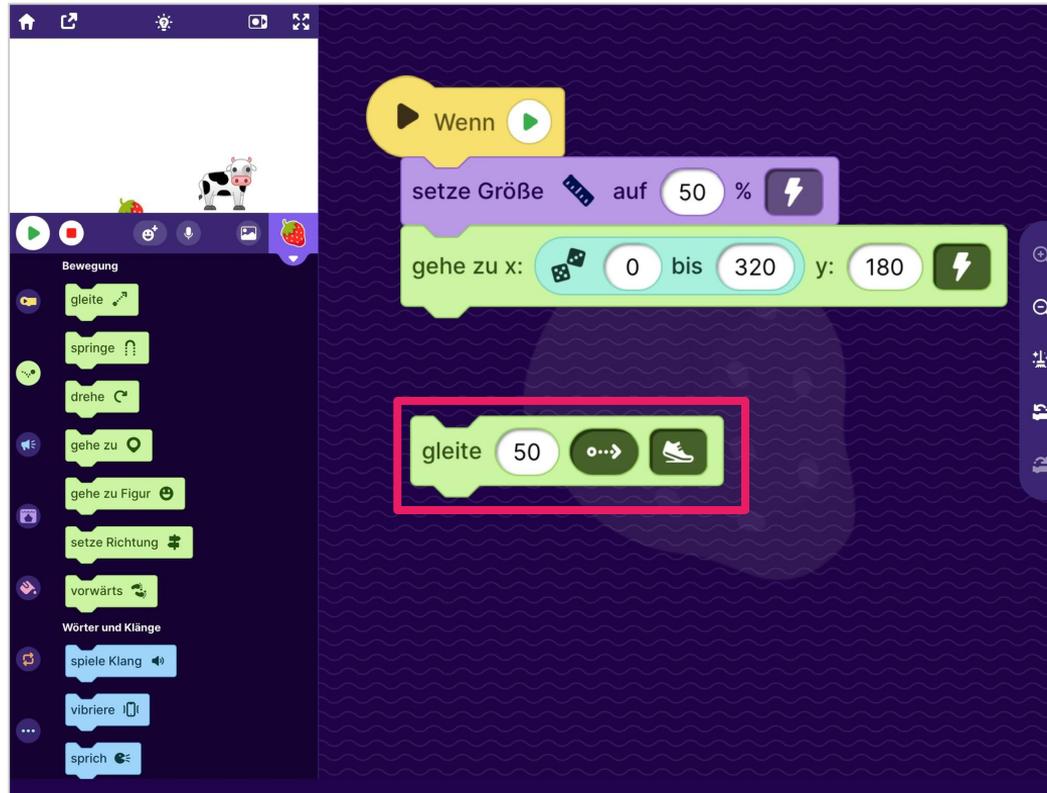
Kategorie “Bewegung”



The image shows the Scratch programming environment. On the left, the 'Bewegung' (Movement) category is highlighted in the sidebar. The main workspace contains a script with the following blocks:

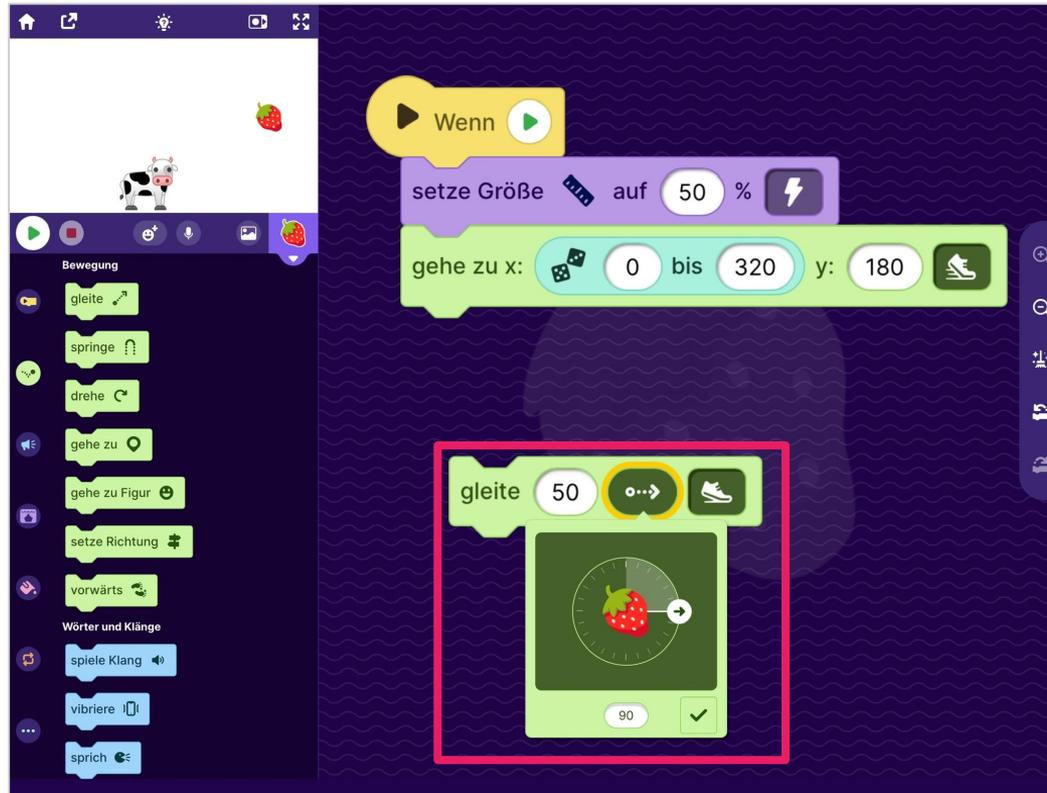
- Wenn** (When green flag clicked)
- setze Größe** (set size) auf **50 %** (to 50%)
- gehe zu x:** (go to x) **0** bis **320** y: **180**

Block "Gleite"

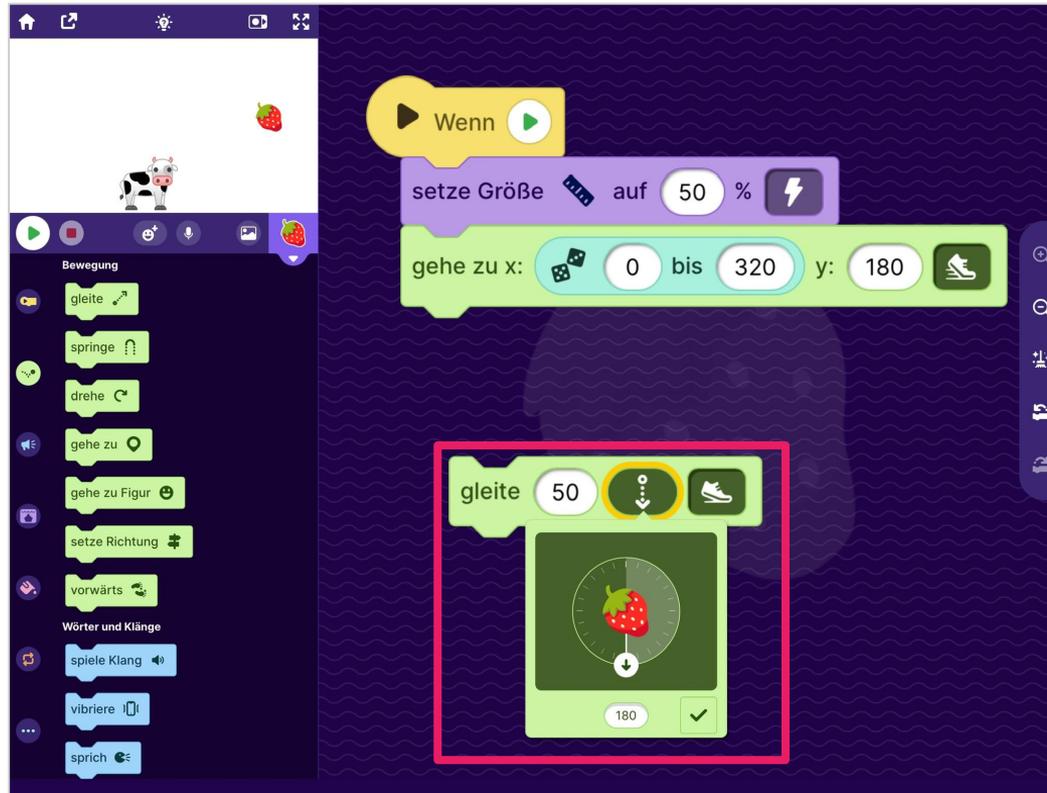


The image shows the Scratch editor interface. On the left is a panel with various block categories: 'Bewegung' (Movement) and 'Wörter und Klänge' (Text and Sound). The 'Bewegung' category is expanded, showing several blocks including 'gleite'. The main workspace on the right contains a script starting with a 'Wenn' (When) block, followed by 'setze Größe auf 50 %' (set size to 50%) and 'gehe zu x: 0 bis 320 y: 180' (go to x: 0 to 320 y: 180). A 'gleite 50' block is highlighted with a red rectangle. This block has a speed of 50 and a 'gleite' icon.

Parameter "Richtung" antippen

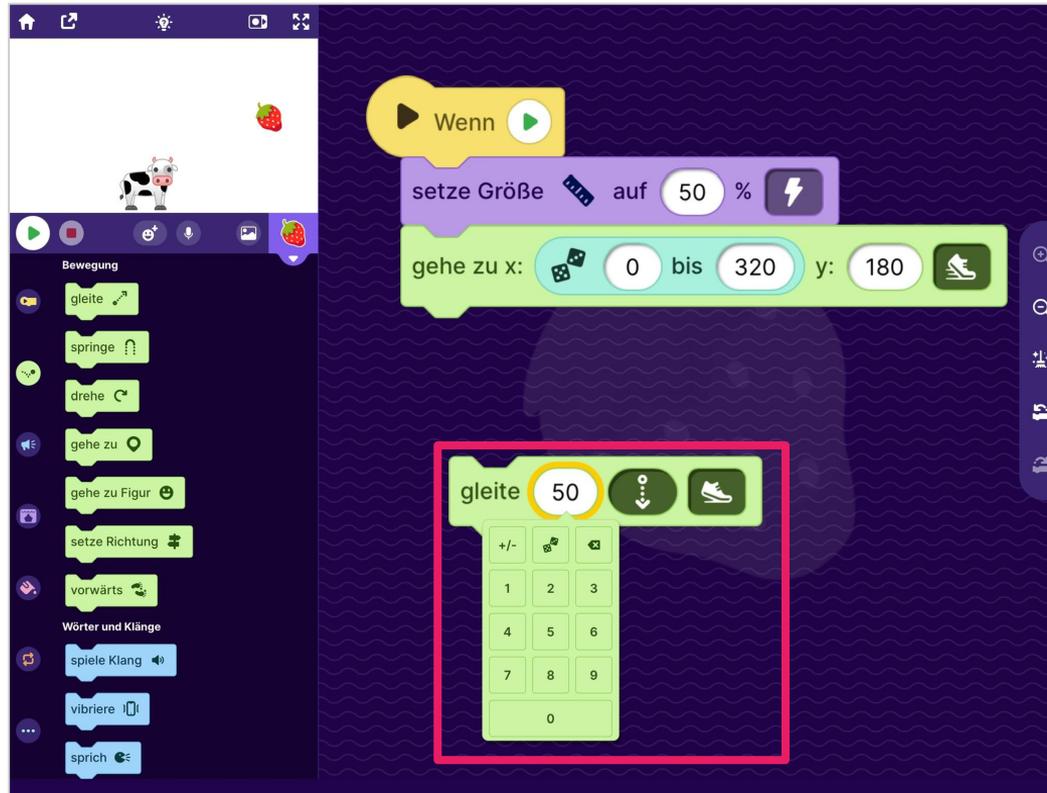


Richtung nach unten



The image shows a Scratch script editor with a dark purple background. On the left, a stage area contains a cow and a strawberry. Below the stage is a list of motion blocks, including 'gleite', 'springe', 'drehe', 'gehe zu', 'gehe zu Figur', 'setze Richtung', 'vorwärts', 'spiele Klang', 'vibriere', and 'sprich'. The main workspace contains a script starting with a yellow 'Wenn' block, followed by a purple 'setze Größe' block set to 50%, and a green 'gehe zu x: 0 bis 320 y: 180' block. A red box highlights a 'gleite' block with a speed of 50 and a direction dial set to 180 degrees. The dial shows a strawberry icon and a downward arrow, with the number 180 and a checkmark below it.

Parameter “Strecke” wählen



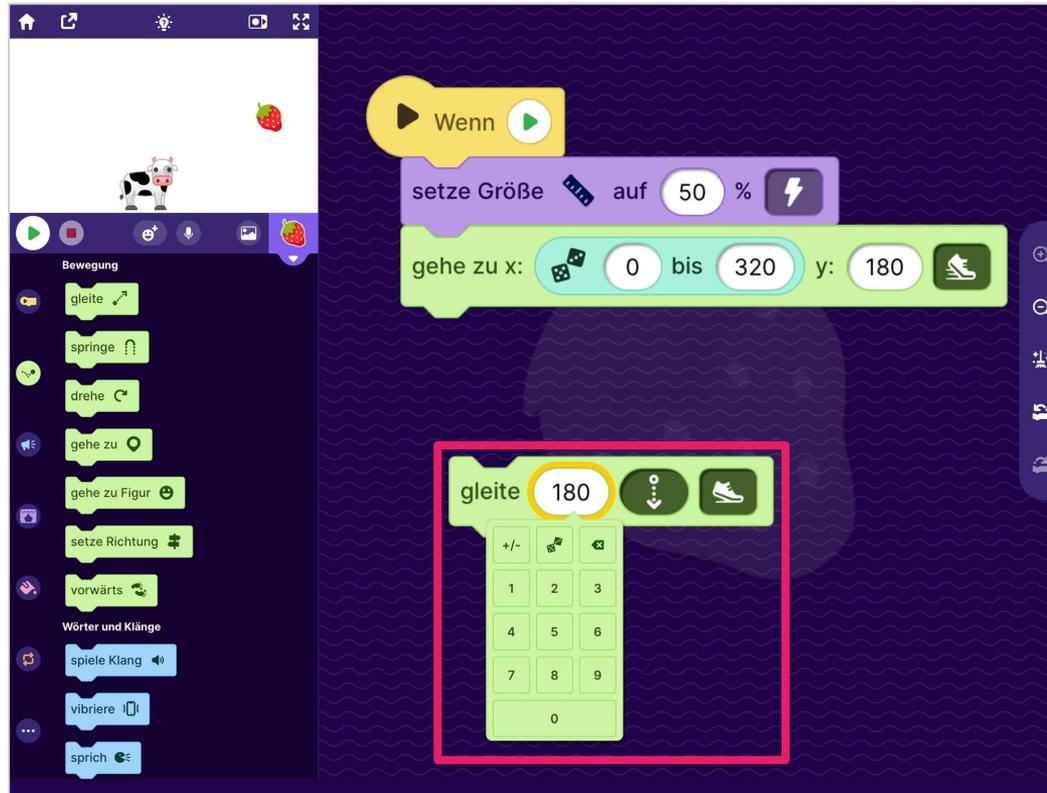
The image shows a Scratch code editor interface. On the left, a stage displays a cow character and a strawberry. Below the stage is a palette of blocks categorized into 'Bewegung' (Movement) and 'Wörter und Klänge' (Text and Sound). The 'Bewegung' palette includes blocks like 'gleite', 'springe', 'drehe', 'gehe zu', 'gehe zu Figur', and 'setze Richtung'. The 'Wörter und Klänge' palette includes 'spiele Klang', 'vibriere', and 'sprich'.

The main workspace shows a script area with the following code blocks:

- A yellow 'Wenn' (When) block.
- A purple 'setze Größe' (set size) block with a lightning bolt icon, set to 'auf 50 %'.
- A green 'gehe zu x:' (go to x) block with a dice icon, set to '0 bis 320 y: 180'.

A red box highlights a 'gleite' (slide) block with a distance parameter of '50'. A numeric keypad is open over this block, allowing the user to select a different distance value. The keypad includes a sign toggle (+/-), a delete key (X), and a grid of numbers from 1 to 9, with 0 at the bottom.

Strecke auf 180 setzen



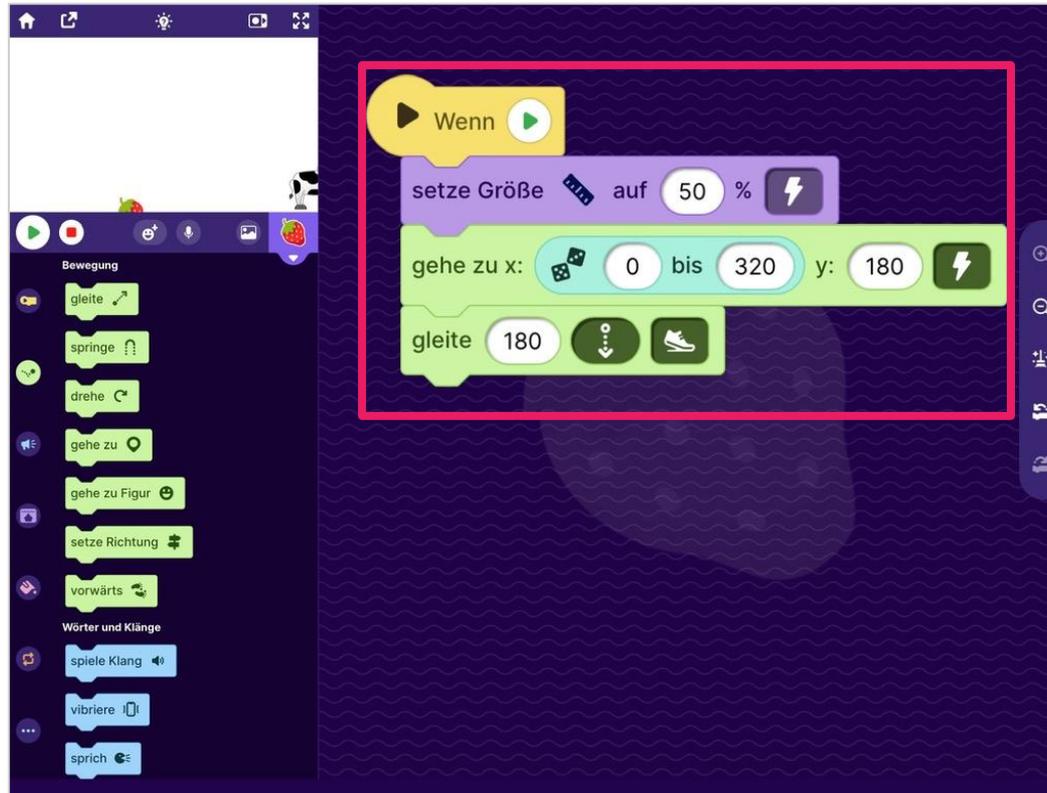
The image shows a Scratch script editor with a dark purple background. On the left, a stage displays a cow and a strawberry. The script area contains the following blocks:

- Wenn** (When green flag clicked)
- setze Größe auf 50%** (Set size to 50%)
- gehe zu x: 0 bis 320 y: 180** (Go to x: 0, y: 180)
- gleite** (Slide) block, currently being edited with a numeric keypad. The value '180' is entered in the distance field.

The numeric keypad for the 'gleite' block is highlighted with a pink border and contains the following values:

+/-		
1	2	3
4	5	6
7	8	9
0		

Baustein anfügen



The image shows a Scratch script editor with a dark purple background. A red rectangular box highlights a 'Wenn' (When) block containing three sub-blocks:

- setze Größe** (set size) block: 'auf 50 %' (to 50 %).
- gehe zu x:** (go to x:) block: '0 bis 320 y: 180'.
- gleite** (glide) block: '180'.

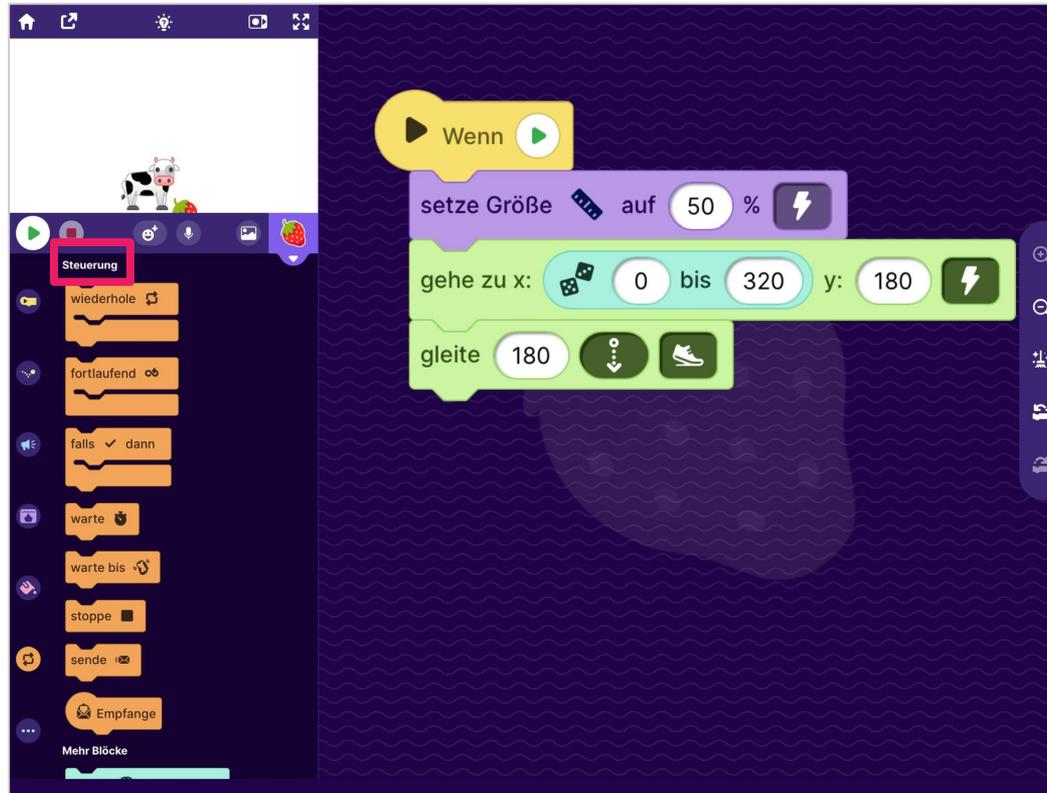
On the left side, a 'Bewegung' (Movement) palette is visible, listing various movement blocks like 'gleite', 'springe', 'drehe', 'gehe zu', 'gehe zu Figur', 'setze Richtung', and 'vorwärts'. Below it, a 'Wörter und Klänge' (Text and Sounds) palette lists 'spiele Klang', 'vibriere', and 'sprich'.

Teste:
Die Erdbeere fällt
einmal von
zufälliger Position

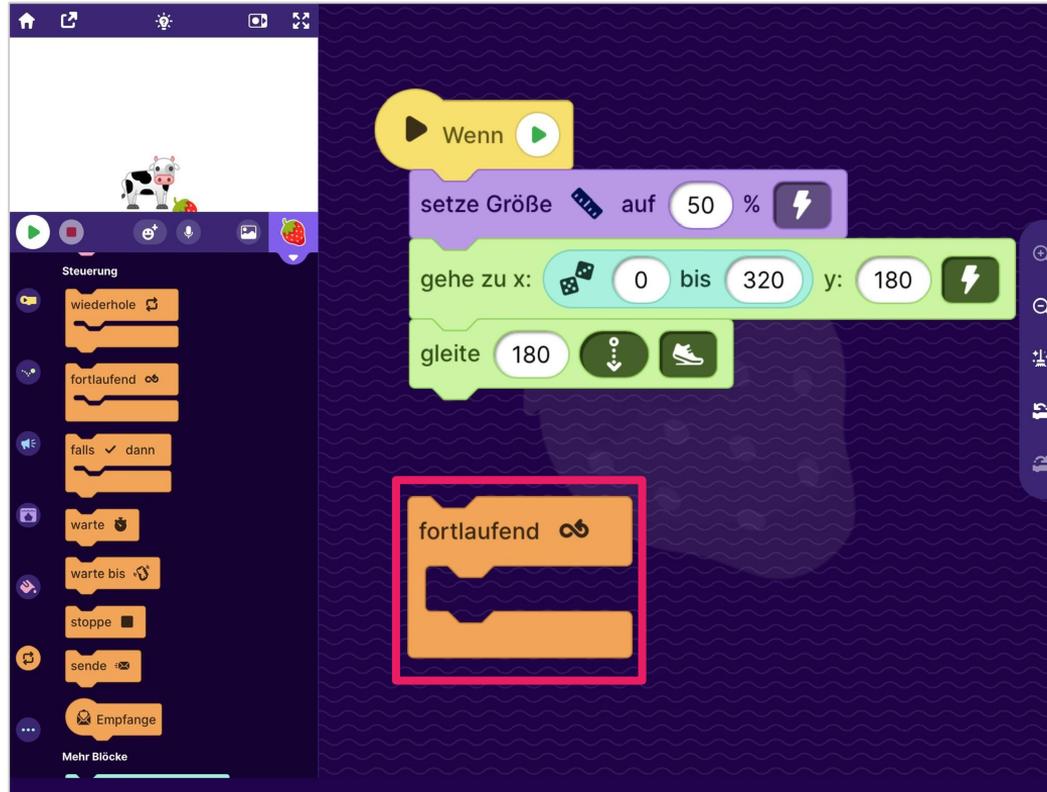




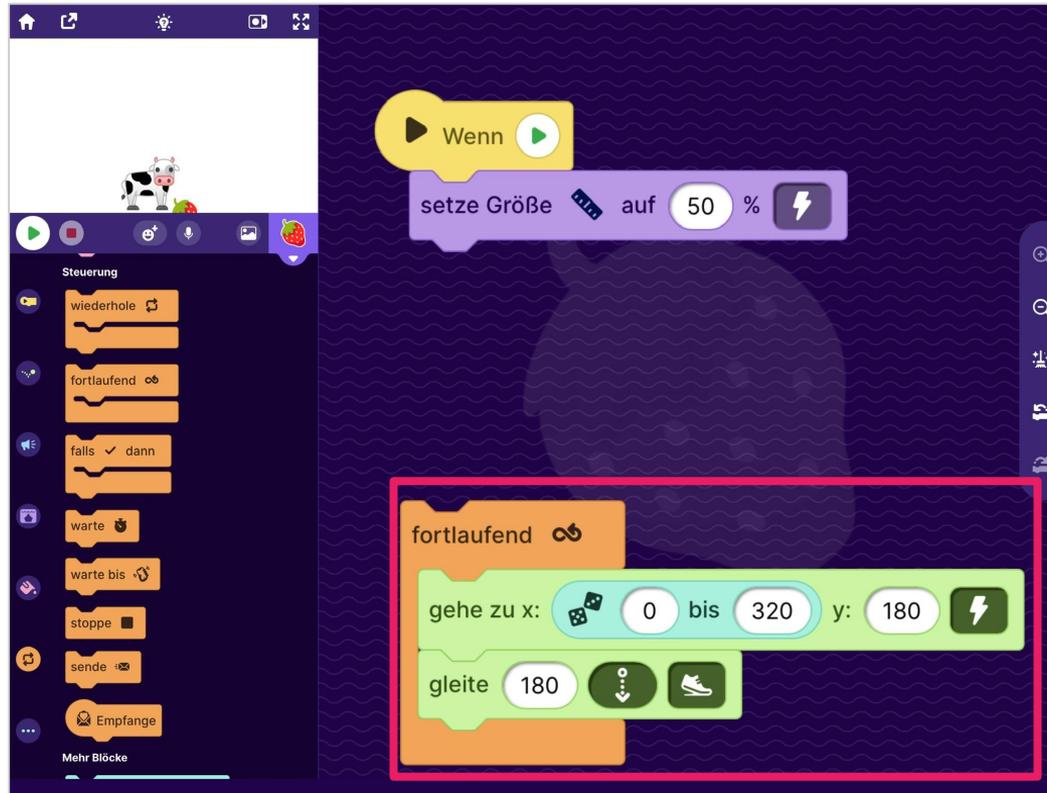
Kategorie “Steuerung”



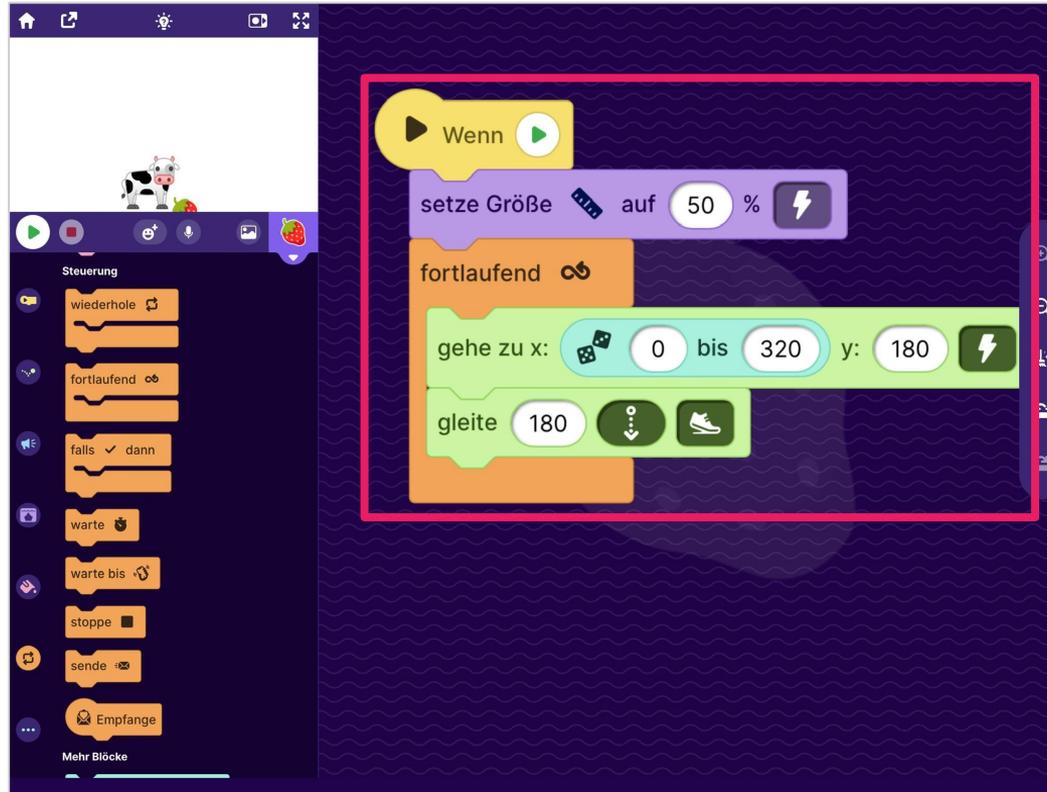
Block "Fortlaufend"



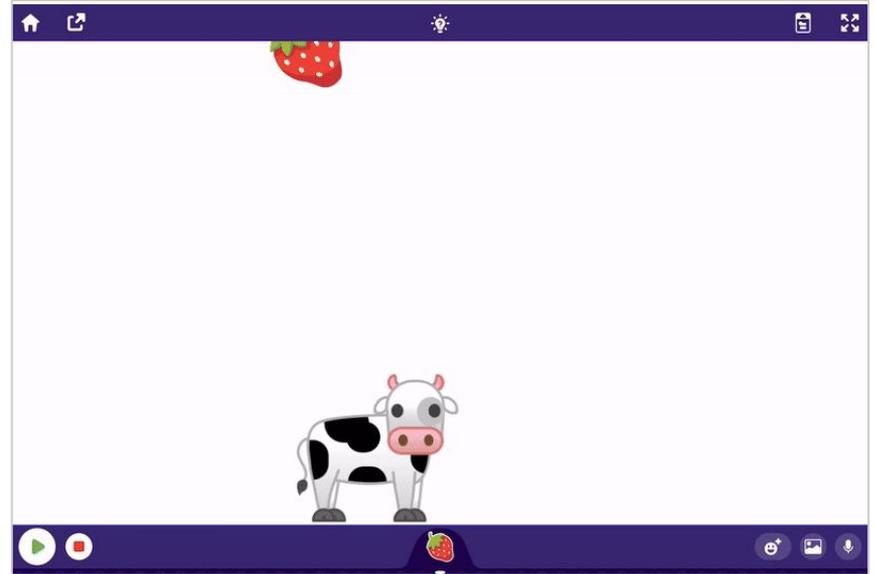
“Gehe zu” und “Gleite” in “Fortlaufend”



Blöcke aneinander bauen

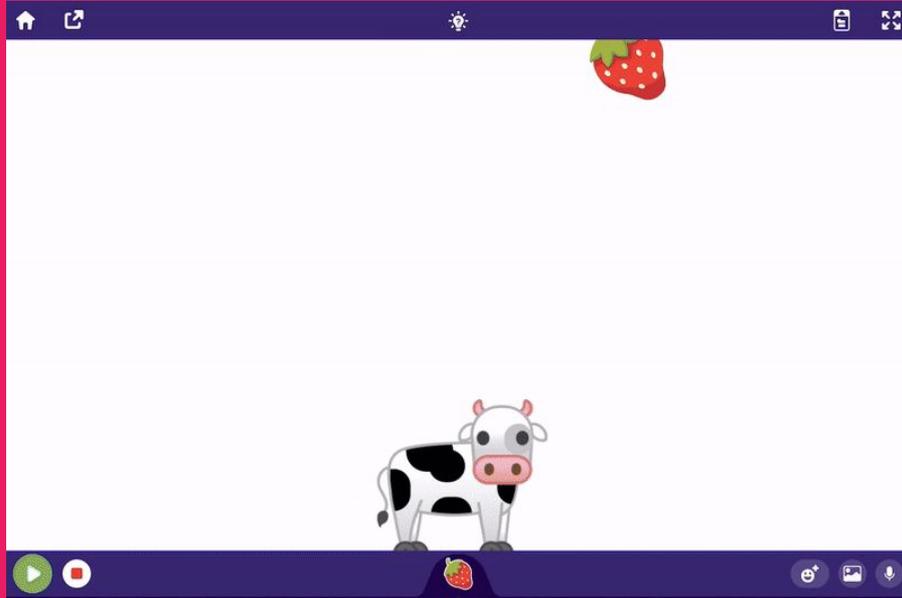


Teste:
Die Erdbeere fällt
immer wieder
von zufälliger
Position

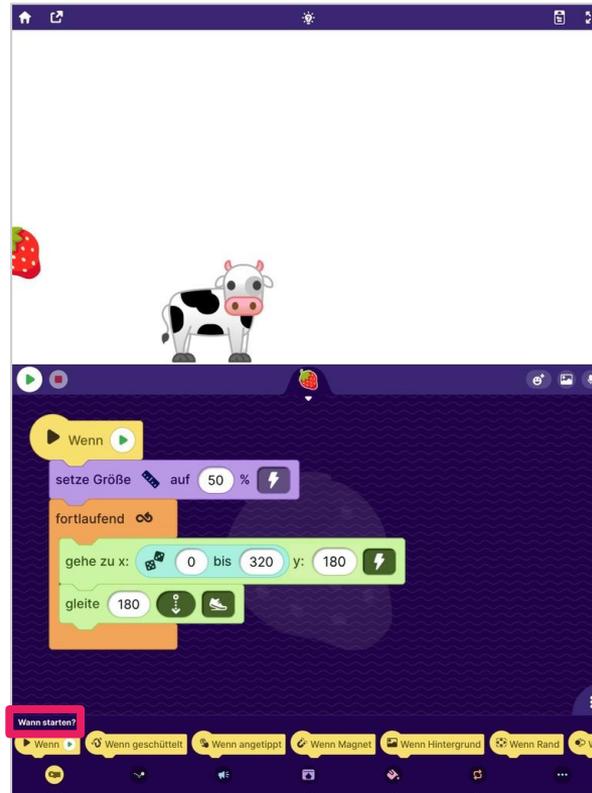


Der Plan

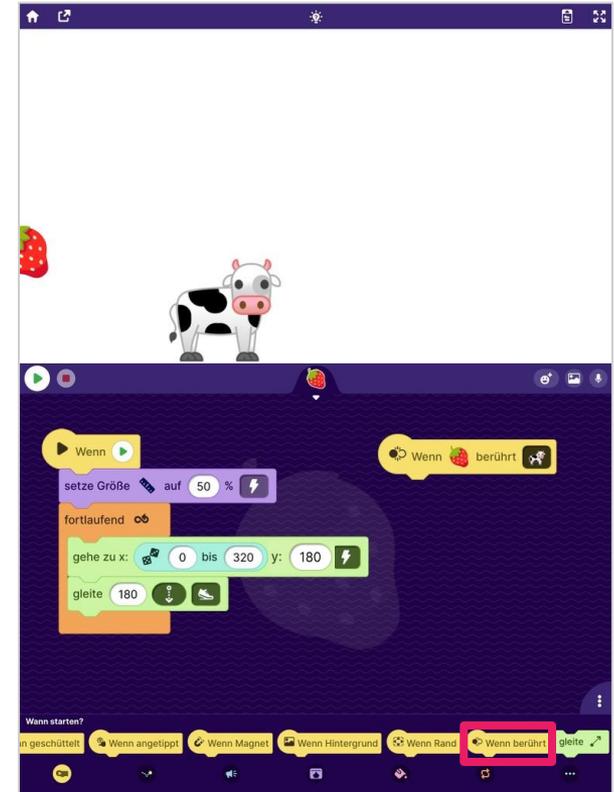
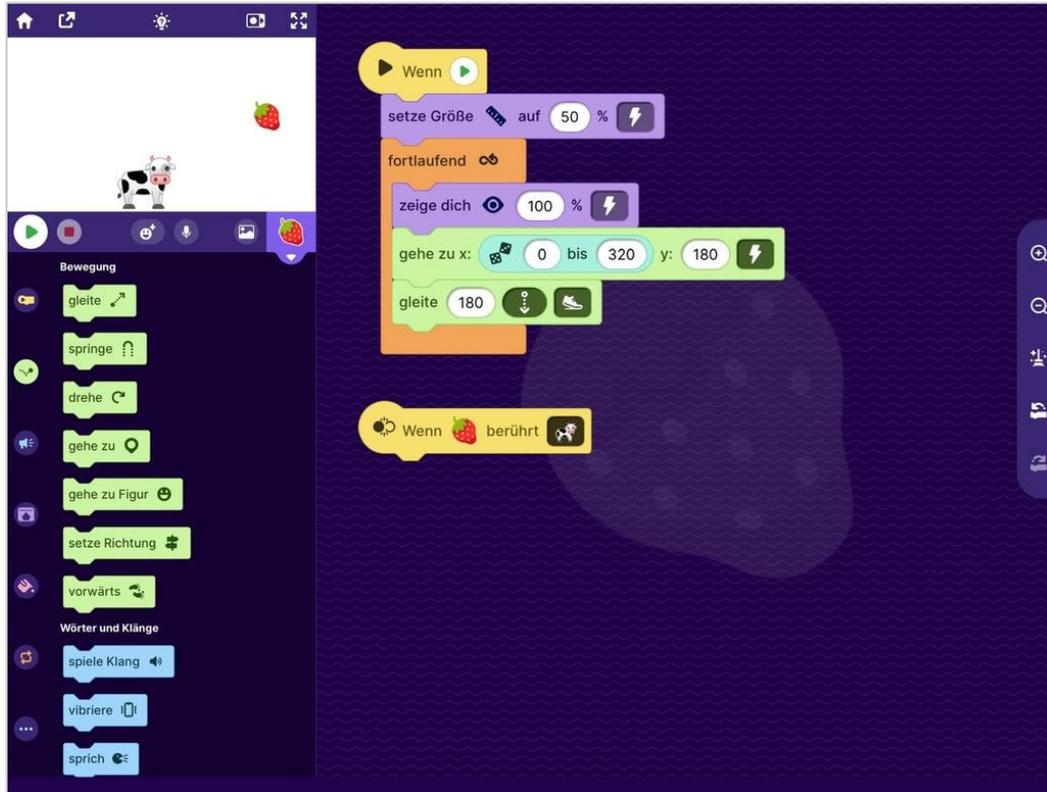
1. Fänger wählen
2. Fänger programmieren
3. Gegenstand wählen
4. Gegenstand programmieren
5. **“Gefangen” erkennen und reagieren**
6. “Daneben” erkennen und reagieren



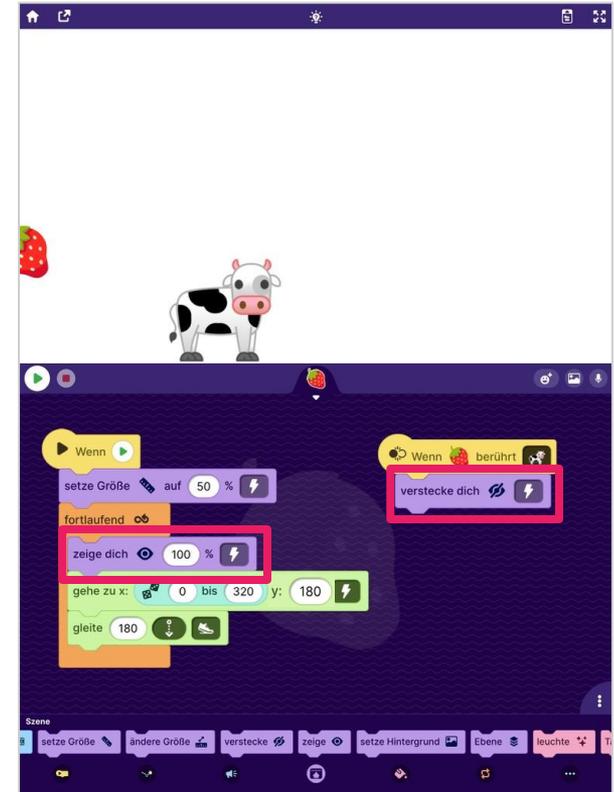
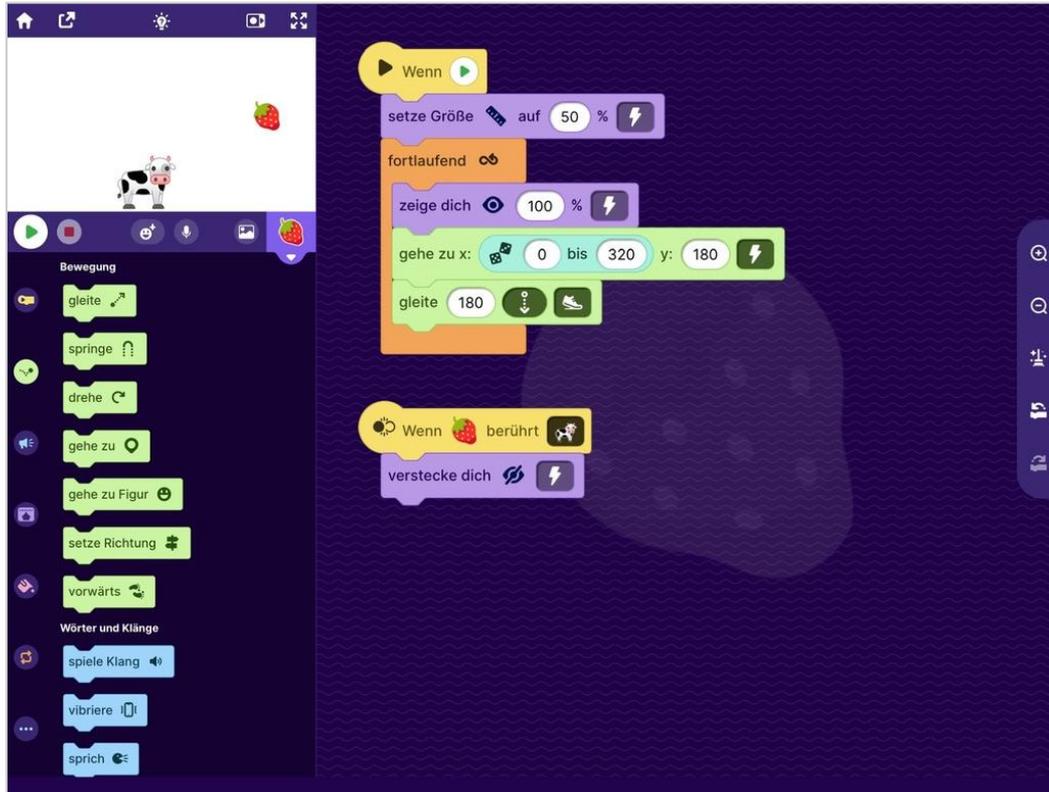
Kategorie “Wann starten?”



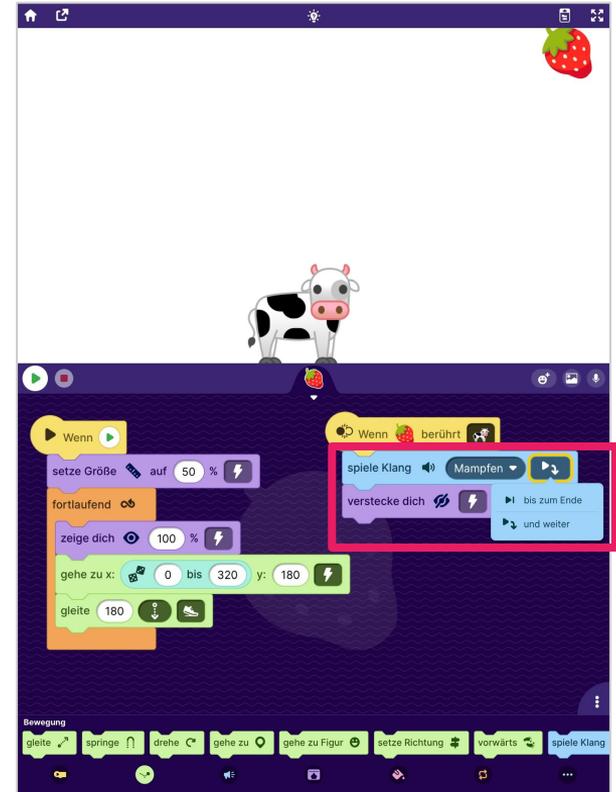
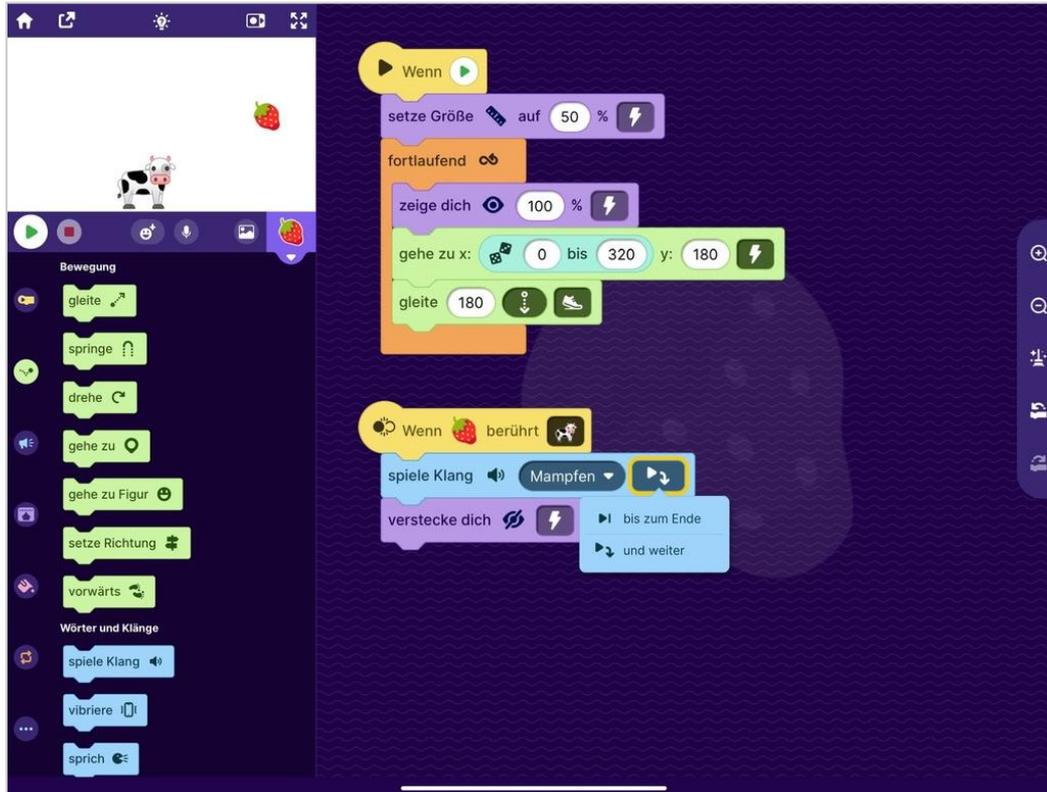
Block "Wenn berührt"



Block “verstecke dich” - und “zeige Dich”, schnell



Block "Spiele Klang" - und weiter

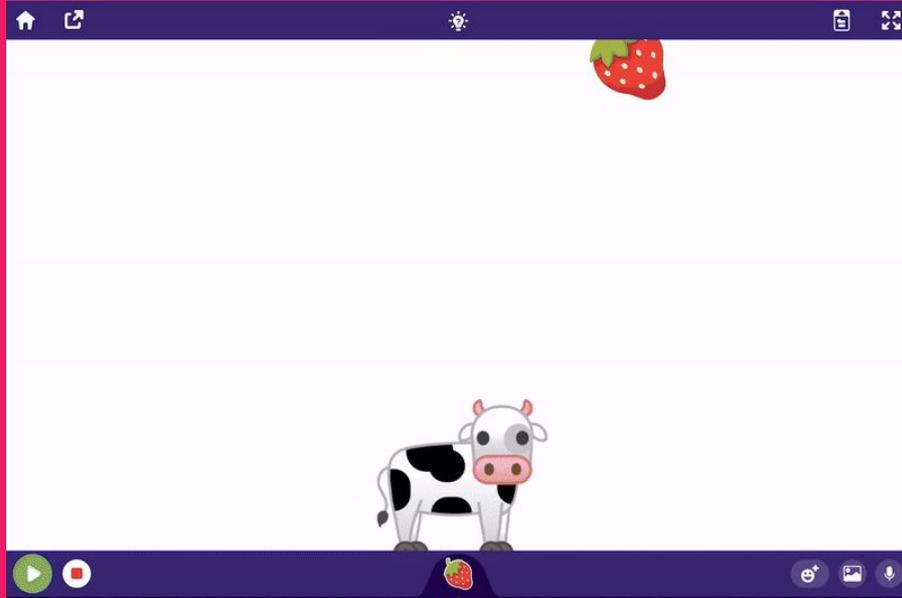


Teste: “Gefangen” erkennen und reagieren

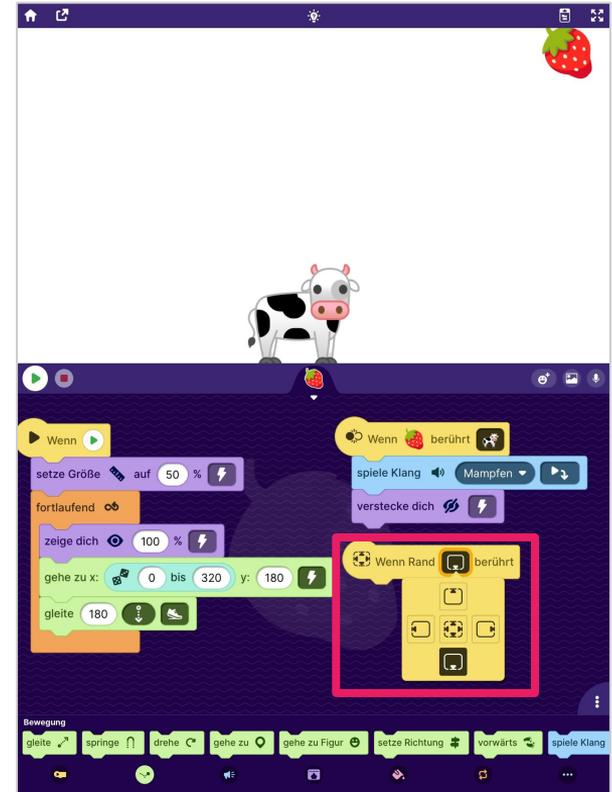
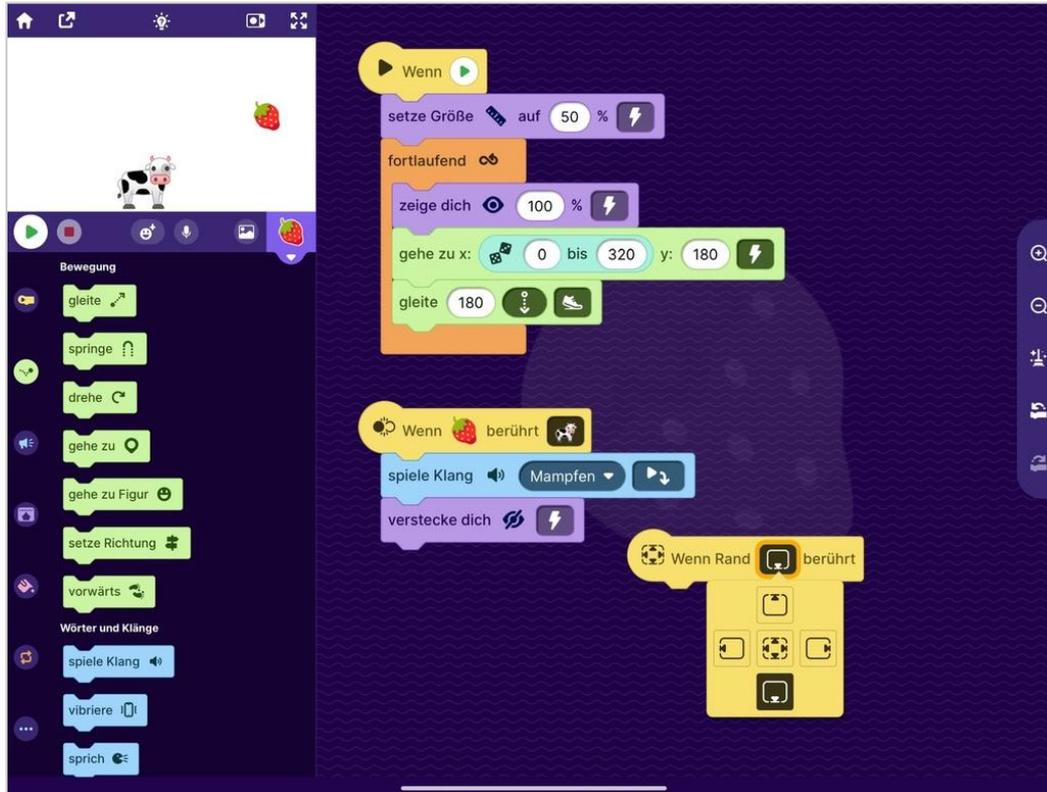


Der Plan

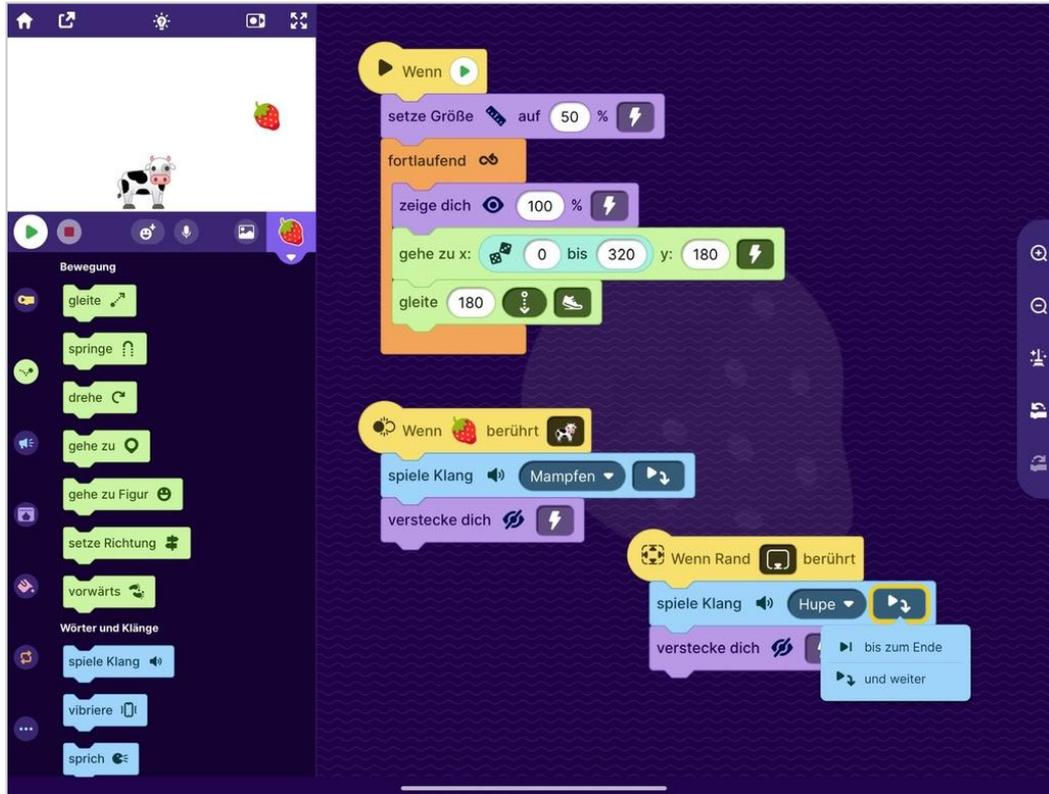
1. Fänger wählen
2. Fänger programmieren
3. Gegenstand wählen
4. Gegenstand programmieren
5. “Gefangen” erkennen und reagieren
6. **“Daneben” erkennen und reagieren**



Block "Wenn Rand berührt" - unten

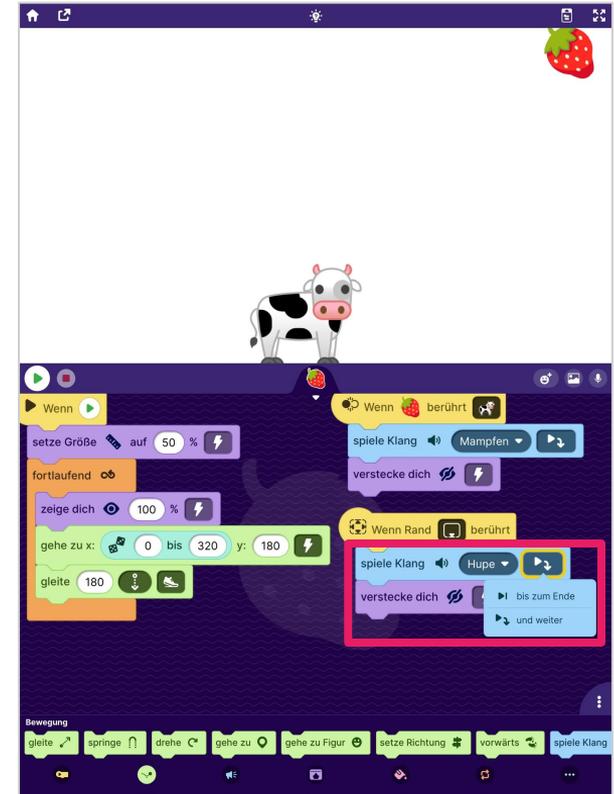


Block “Spiele Klang” - und weiter, “Verstecke Dich”



```

    When green flag clicked
      set size to 50%
      forever loop
        show myself 100%
        go to x: 0 y: 180
        slide 180
      When strawberry is clicked
        play sound Mampfen
        hide myself
      When edge is clicked
        play sound Hupe
        hide myself
  
```



```

    When green flag clicked
      set size to 50%
      forever loop
        show myself 100%
        go to x: 0 y: 180
        slide 180
      When strawberry is touched
        play sound Mampfen
        hide myself
      When edge is touched
        play sound Hupe
        hide myself
        go to end
  
```

Teste:
“Daneben”
erkennen und
reagieren



Vollständige Programmierung

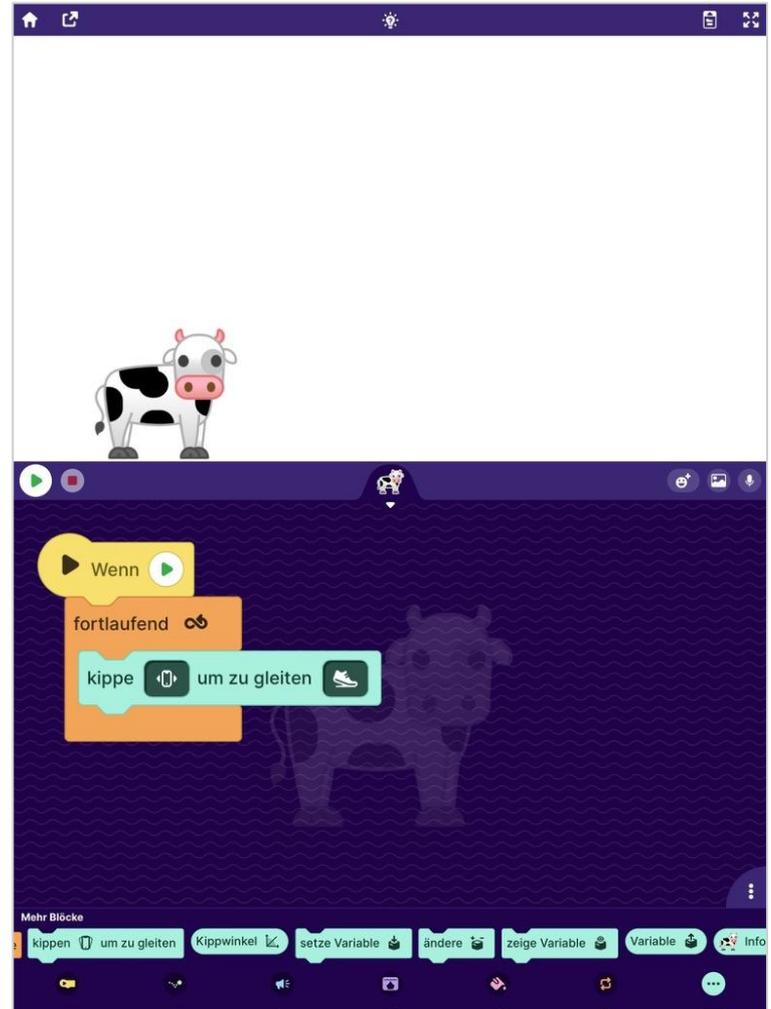
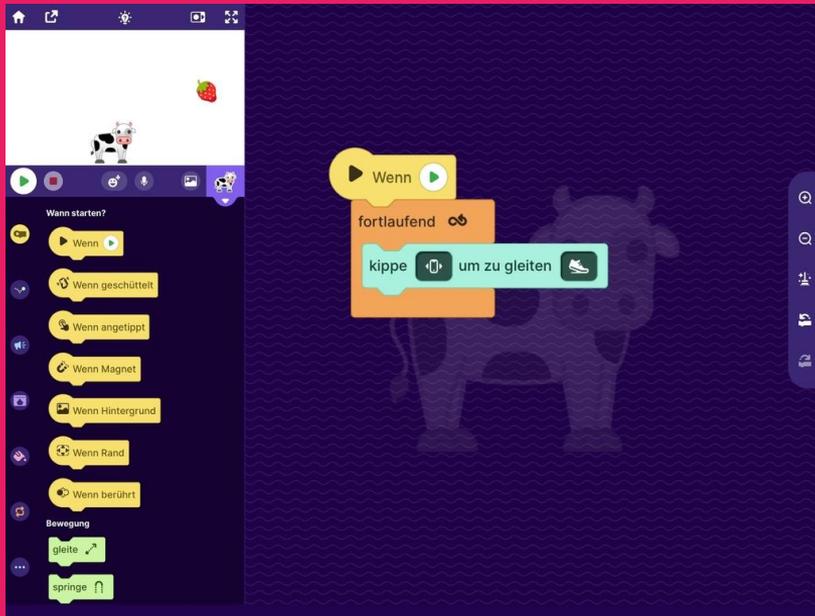


Programmierung Gegenstand

Scratch programming interface showing a cow character and a strawberry object. The script area contains a 'Wenn' block with a 'Berührt' trigger, followed by 'setze Größe auf 50%', a 'fortlaufend' loop with 'zeige dich 100%', 'gehe zu x: 0 bis 320 y: 180', and 'gleite 180'. Another 'Wenn' block with 'Berührt' trigger has 'spiele Klang Mampfen' and 'verstecke dich'. A 'Wenn Rand berührt' block has 'spiele Klang Hupe' and 'verstecke dich'.

Scratch programming interface showing a cow character and a strawberry object. The script area contains a 'Wenn' block with a 'Berührt' trigger, followed by 'setze Größe auf 50%', a 'fortlaufend' loop with 'zeige dich 100%', 'gehe zu x: 0 bis 320 y: 180', and 'gleite 180'. Another 'Wenn' block with 'Berührt' trigger has 'spiele Klang Mampfen' and 'verstecke dich'. A 'Wenn Rand berührt' block has 'spiele Klang Hupe' and 'verstecke dich'.

Programmierung Fänger



Super gemacht!



So könnte es weitergehen:

- Anderes Hintergrundbild
- Punkte zählen
- Gegenstände, die Minuspunkte ergeben
- mehrere Leben
- weitere Animationen für “Gefangen” oder “Daneben”
- ...

