

## Inspire Computing Year 2 Workbook Answers

### Unit 1

#### Lesson 1

**1 offline world:** This is the world all around you, and you do not need a digital device to connect; **online world:** This is the world of the internet, which you connect to using a digital device.

**2 Examples:** open all the time, you can do research before buying, more choice, you can easily shop around for cheapest price, if one shop has run out of an item it's easy to find it elsewhere online, home delivery

**3 Examples:** most shops aren't open all the time, you might go there and they don't have your item in stock, less choice, you don't necessarily know if you have the best price/deal, if it's a large or heavy item, it's difficult to get it home

**4 Student's own answer**

#### Lesson 2

**1 survey:** A set of questions to gather information; **online shopping:** Buying things on the internet using a device; **offline shopping:** Going into a shop to buy things; **data:** A collection of information or results.

**2**

How do you do most of your shopping?	or	Where do you do most of your shopping?
Offline <input type="checkbox"/> Online <input type="checkbox"/>		_____
How many times do you shop every month?	or	How often do you shop online every month?
1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>		1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 or more <input type="checkbox"/>
Do you like shopping offline?	or	Which do you like best: shopping online or offline?
Yes <input type="checkbox"/> No <input type="checkbox"/>		Offline <input type="checkbox"/> Online <input type="checkbox"/>

**3 a) 20 b) in a shop c) true**

**4 Examples:** Do you buy more things online or offline? Do you prefer to buy things online or offline? What items do you buy online? What items do you buy offline?

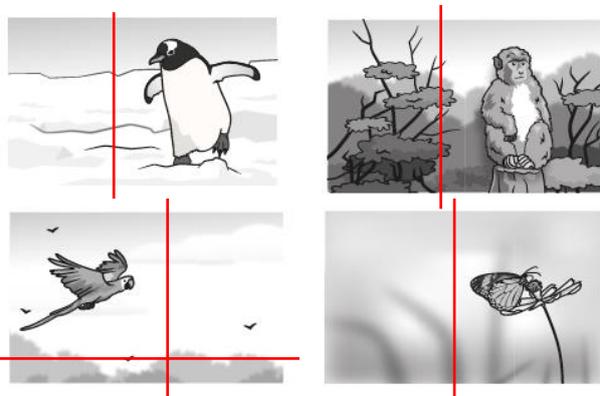
#### Lesson 3

**1 A search engine**

**2 a) The image of trees b) Examples:** trees, tree, forest, woods

3 1 Type a keyword or phrase. 2 Press 'enter' or click the search icon. 3 Right-click and select 'Save image as' to save your image.

4



5 Examples: to cut out any unwanted parts, to reduce the size of the image, to reduce the size of the file, so that the images fits better on the page/slide

## Lesson 4

1 The image has been cropped.

2 Examples: cropping, filters, resize – or students may choose to name individual filter effects such as change to black and white, mirror, twirl, distort, sepia, etc.

3 Student's own answer

4 **resize**: Changes the size of an image, to make it bigger or smaller; **filter**: Changes the colours of the image. Can also add other special effects, such as blurring; **crop**: Takes away any unwanted objects from around the image.

## Lesson 5

1 **a)** You should tell a trusted adult. **b)** No because they may not be who they say they are. **c)** No because it's easy to tell lies or pretend to be someone else online **d)** Just be careful not to share any personal information when online.

2 B

3 The motto means that you should be nice to other people, because you would want them to be nice to you.

## Lesson 6

1 Offline: I would say go to the till and look for a shop assistant with a shop uniform to help., who will have procedures in place for helping lost children.

Online: She should not give her phone number and should tell a trusted adult about the contact from a stranger.

Offline: They should not give their address if they don't know the older children.

2 Example: A digital footprint is a log of all the information you leave behind when visiting websites.

3 Student's own answer

## Lesson 7

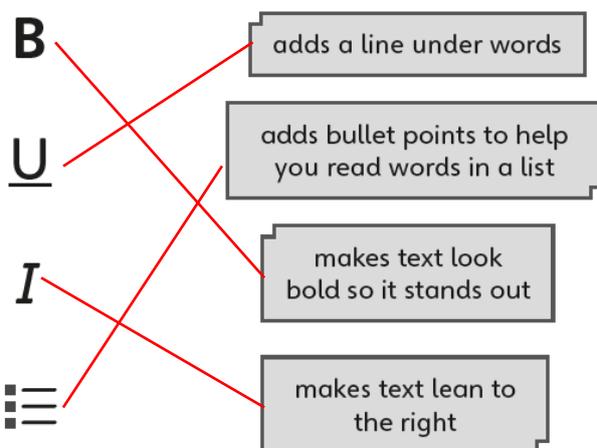
1, 2, 3 and 4 Student's own answers

## Lesson 8

1, 2, 3 and 4 Student's own answers

## Lesson 9

1



2 It is best to use word processing or publishing software to create a poster. It is important to save your work regularly and make sure you have used a sensible filename.

3 C

## Lesson 10

1 Student's own answers

2 Examples: add images or shapes for more interest, vary the fonts used, spread the text out around the page, use formatting like bold, underlining, italics and bullet points to make key information stand out

## End-of-unit assessment

1 The offline world is all around you, and you do not need a digital device to connect with others. The online world is the world of the internet, which you connect to using a digital device.

2 B

3 B

4 **crop**: cuts out part of an image; **filter**: changes how an image looks, such as changing a colour image to black and white

5 A

## Unit 2

### Lesson 1

1 Example: A green screen allows a background to be added to a video.

2 Examples: Yusuf: sandals, shorts, t-shirt, sunhat; Sofia: coat, scarf, boots, hat

3 The boy is wearing the wrong clothes (he should be wearing a spacesuit) and there is a giraffe in the background (giraffes don't live on the moon).

4 Student's own answer

### Lesson 2

1, 2 and 3 Student's own answers

4 **background**: This is the layer behind everything; **foreground**: This is the layer closest to the camera.

5 Examples: mountains with snow, a rainy scene with puddles, wind blowing in trees

6 Student's own answer

### Lesson 3

1 A recount should be about facts because you are recounting a real event.

2 Examples: written – such as news articles and diaries, verbal – videos or audio such as news reports or podcasts

3 What happened? When did it happen? Where did it happen? Who was there? Why did it happen?

4 Student's own answers

### Lesson 4

1 **characters**: any people in the video; **script**: what the character is going to say; **background**: the images behind the characters or a presenter

2 and 3 Student's own answers

### Lesson 5

1, 2 and 3 Student's own answers

### Lesson 6

1 and 2 Student's own answers

### Lesson 7

1 **a)** controls the camera **b)** talks to the camera **c)** edits the video after it has been recorded

2

- Keep the camera still. A tripod may help you.
- Do not cover the microphone so that you can be heard.
- Speak in a loud, clear voice.
- Look at the camera when you speak.
- Make sure your whole background is the colour green.

**3 trim/crop:** This cuts out parts of the video clip from the beginning or the end, to make it shorter; **split:** This lets you break up the video file into one or more parts; **delete:** This removes parts that you do not want; **undo:** This puts things back to how they were before the last change you made.

## Lesson 8

1, 2, 3 and 4 Student's own answers

## Lesson 9

1 Student's own answer

## Lesson 10

1 and 2 Student's own answers

## End-of-unit assessment

1 B

2 C

3 There are three key tools in a green screen application. The crop/trim tool cuts out part of the video clip to make it shorter. The split tool lets you break up the video file into one or more parts. The delete tool removes parts that you do not want.

4 A

5 Examples: introduction, main story, ending, movements/actions, speech, emotions. Or students may use the questions what, when, where, who, why?

## Unit 3

### Lesson 1

1 Examples: student class presentation, school assembly, teacher giving a lesson, showing people how to use something

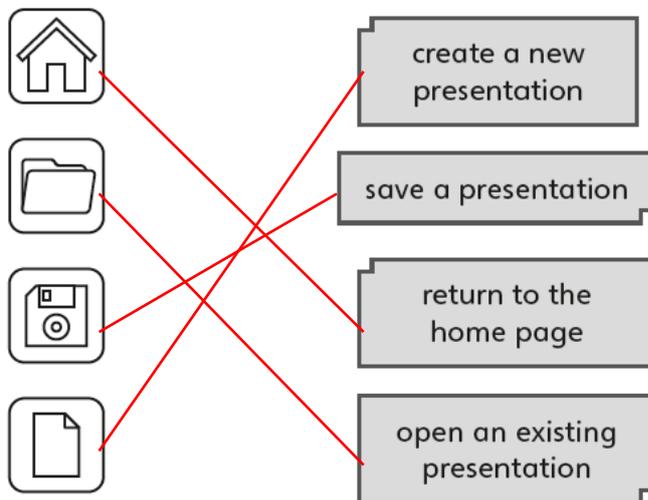
2 Examples: news reporter, weather reporter, someone giving a talk on a product

3 Examples: Where is it from? What sort of bicycle is it? How long have you had it? What is your favourite thing about it?

4 Example: Presentation software and a large screen are useful for displaying images and text while you are presenting.

### Lesson 2

1



2 a) C b) Example: Lucia\_river\_presentation

3 A

### Lesson 3

1 and 2 Student's own answers

3

The slide is titled "Elephants" and contains the following sections:

- Introduction:** "Elephants are interesting animals. Read all about them below."
- Image:** A large illustration of an elephant.
- Headings:** "Fun Facts" and "What do elephants eat?"
- Paragraphs:**
  - Under "What do elephants eat?": "Elephants like to eat a plant-based diet. Their main foods are leaves, grass and branches. Elephants love to eat bananas, sugarcane and rice."
  - Under "Fun Facts": "There are 2 kinds of elephants, called African and Asian elephants. One of the differences is their ear shape and size!"
  - Below the "Fun Facts" text: "Elephants can run at 38 kilometres per hour." and "Elephants suck up to 8 litres of water into their trunk and then shoot it into their mouths."
- Picture or diagrams:** Two smaller elephant illustrations labeled "African" and "Asian".
- Labels:** "African" and "Asian" text labels pointing to the respective elephant images.
- Decorative elements:** Four paw prints at the bottom left.

Lesson 4

1 **File:** opening, closing and saving presentations; **Insert:** tools for adding text, images and shapes; **Design:** changing the background and theme of a presentation

2 C

3 Examples: solid fill, gradient fill, pattern fill, texture fill, picture fill

4 font style, text size

Lesson 5

1 a) dark b) light

2

The screenshot shows a font toolbar with the following elements labeled:

- font selection tool:** Points to the dropdown menu showing "Calibri Light (Headings)".
- select font size:** Points to the dropdown menu showing "60".
- change the text colour:** Points to the color selection icon (a circle with an 'A' inside).

3 a) Transitions are how a presentation moves from one slide to another.

b) Examples: fade, push, wipe, split, reveal

c) Animation is used to make text and objects appear and disappear on a slide.

d) Examples: appear, fade, fly in, wipe

### Lesson 6

1 Examples: What headings to include? What information will go on each slide? Do you need photos, drawings or diagrams? How many slides are needed?

2 D

### Lesson 7

1 A

2 False, True, True, False

### Lesson 8

1 Examples: changing the background, changing the font style, changing the text colour, using animation

2 an image has been added, a title has been added, the text has been shortened to the key points

### Lesson 9

1 Examples: look at your audience, speak slowly and clearly, stand where you can be seen easily, do not stand in front of your slides, make sure your audience can read your text

2 Feedback is telling someone about the things you like in their work and what things they could improve.

3 Examples: Did the presenter share lots of information? Does the text stand out? Is the font easy to read? Could you see the slides while the presenter was presenting? Did the presenter use a clear, loud voice? Did the presenter use animations well? Did the presenter use transitions well?

### Lesson 10

1 Examples: transitions: make sure that transitions are not too fast or too slow; animations: do not add too many animations as it can be too distracting; font style, colour and size: use different fonts to add interest but make sure that they are easy to read; images: images should match the information on the slide.

2 When reviewing a presentation, you should check that the font used is clear and easy to read. The colour of the text needs to stand out against the background colour. Slides should contain a mix of text and images, and images should match the topic of the slide. If there is a lot of text on a slide, you can break it up by using bullet points.

### End-of-unit assessment

1 A

2 C

**3 transition:** This creates a movement when going from one page to another; **animation:** This makes your heading move on the page; **slide:** This is a page in your presentation.

4 A

5 C

## Unit 4

### Lesson 1

1 Move 3 steps forward. Turn left. Hop 3 times.

2 An algorithm becomes a program when it is written as code and run on a computer.

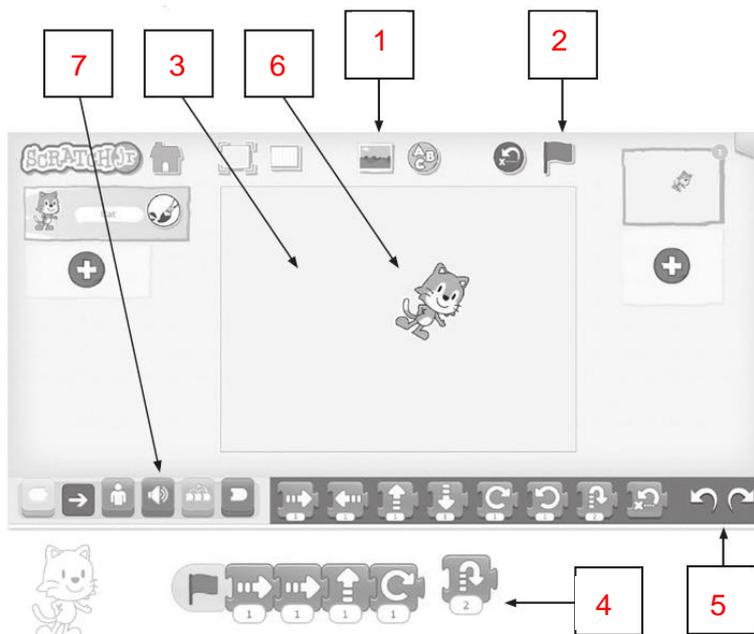
3 1 Take out a glass. 2 Take orange juice out of fridge. 3 Pour orange juice into glass. 4 Put away orange juice. 5 Enjoy drink. (1 and 2 are interchangeable)

4 B

### Lesson 2

1 **sprite**: an object or character; **stage**: the game area; **background**: the image that covers the stage; **block**: program instruction pieces; **script**: a set of instructions linked together; **undo/redo**: step back or repeat the last action in the app

2



### Lesson 3

1 Debugging is finding and fixing errors in an algorithm so that it works correctly.

2 1 Go to the bathroom. 2 Pick up your toothbrush. 3 Put toothpaste on the toothbrush. 4 Brush your teeth. 5 Rinse your toothbrush. 6 Put the toothbrush away.

3 Example:

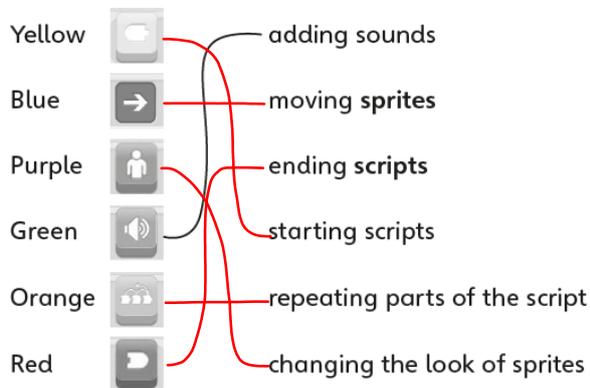
```
pick up water bottle
hold it in your left hand
remove the lid with your right hand
drink
```

put down the bottle

stop

## Lesson 4

1



2 a) C b) B c) A

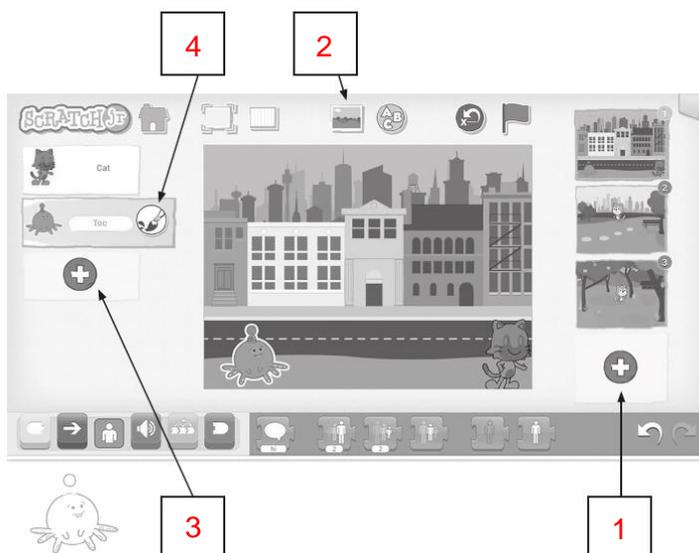
## Lesson 5

1 Backwards programming is a technique used to help plan a program. You start by thinking about what you want the program to do, then you plan the steps you need to program.

2 The last two blocks are incorrect. It should have the 'Go Home' block at the end.

## Lesson 6

1



2 D

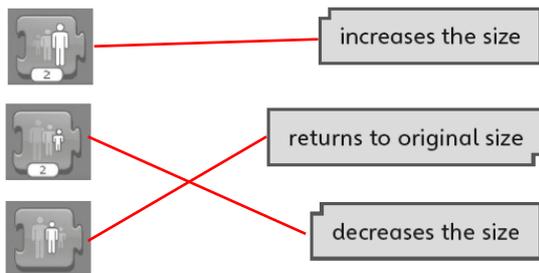
3 B

## Lesson 7

- 1 Examples: characters, the background, character movement, character speech, the story
- 2 a) using directional arrows b) using speech bubbles

## Lesson 8

1



2 D

3 Looks

## Lesson 9

1 A

2 He has the wrong number in the second move right block, it should be 3, not 2.



3 They did not add 'Hello' in the speech block. It is empty.



4 D

## Lesson 10

1 and 2 Student's own answers

## End-of-unit assessment

1 B

2 C

3 B

4 C

5 A

## Unit 5

### Lesson 1

1 a) Forward moves the turtle in the direction it is facing. b) Left turns 90 degrees to the left.  
c) Right turns 90 degrees to the right.

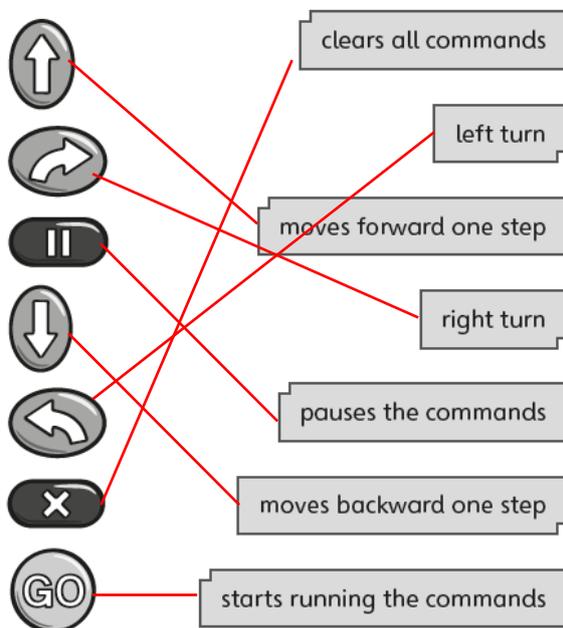
2 Student's own answer

3 A

4 forward → fd, backward → bk, clear screen → cs, left → lt, right → rt

### Lesson 2

1



2 a) C b) B c) C d) C

### Lesson 3

1 farm, park, petrol station

2 Example: fd, lt, fd, rt, fd, lt, fd, lt, fd, fd, fd, fd

3 fd, fd, fd, fd, rt, fd, fd, fd, fd, rt, fd, fd, rt, fd

### Lesson 4

1 A route is a path that you take from one place to another.

2 Example: rt, fd 2, rt, fd

3 a) Efficient means the shortest route with the fewest steps. b) A: 12; B: 10 c) map B

## Lesson 5

1

a) fd, fd, lt, fd, fd, lt, fd, fd

b) fd, rt, fd

c) fd, fd, fd, lt, fd, fd

d) fd, rt, fd, fd, rt, fd, fd

(Students can also use fd 2, fd 3, etc. for multiple moves in the same direction.)

## Lesson 6

1 B

2 1 Check which way the turtle is facing. 2 Plan your route. 3 Write your algorithm down. 4 Remember to press the 'clear' button before you enter the program. 5 Enter the program into the turtle. 6 Press the 'Go' button to start your program.

3 the sea, the salad

## Lesson 7

1 elephant, zebra, monkey

2 Example: fd, fd, lt, fd, rt, fd, rt, fd, fd, lt, fd

3 fd, fd, fd, fd, rt, fd, fd, fd, rt, fd, fd

## Lesson 8

1 fd, fd, fd, fd, rt, fd, rt, fd, fd, rt, fd, fd, fd, rt, fd

2 and 3 Student's own answers

## Lesson 9

1 Student's own answer

2 a) HELLO b) CAT c) FISH d) TURTLE e) FINISH

## Lesson 10

1



2 fd, rt, fd, lt, fd, rt, fd, lt, fd, rt, fd

3 fd, fd, fd, rt, fd, fd, fd (or fd 3, rt, fd 3)

4 a) The first route looks the shortest but uses lots of commands. The second one looks longer but uses less commands. b) the second route

### End-of-unit assessment

1 A

2 B

3 C

4

R fd, fd, rt, fd, fd, fd

O lt, fd, fd, lt, fd

B fd, fd, lt, fd, fd, fd

O rt, rt, fd, fd, fd, rt, fd, fd

T fd

## Unit 6

### Lesson 1

1 A network is a group of people or things. They are connected.

2 Examples: mum, dad, brothers and sisters, grandparents, step family

3 and 4 Student's own answers

### Lesson 2

1 a) Her dad's b) Netball Friends and School Friends c) She is family and also in part of her netball friend's group d) Ahmed

### Lesson 3 and 4

1 Examples:

- make calls
- take photographs
- send emails
- send messages
- search online
- play music
- stream videos
- stopwatch/timer/clock
- access social media
- play games
- calculator
- calendar

2 Examples:

a) Phone masts connect to each other using underground wires.

b) A mobile phone sends a message to the nearest mast and the message is sent from one mast to another until it reaches the mast nearest to the person you are calling.

c) If there was no phone mast nearby the message wouldn't send.

3 Many phones are smartphones. This means that they can do lots of tasks as well as make phone calls and send messages, such as taking photos and using apps. A mobile phone connects to the network. When someone makes a call the phone connects to a nearby mast. These are special radio stations that connect to one another through underground wires. Each mast has its own area, which is called a cell. The message moves from mast to mast, until it reaches the nearest mast to the person receiving the call. The message then travels through the air to the person's phone.

4 Student's own answer

### Lesson 5

1 Global Positioning System

2 The student could mark anywhere in orbit around the Earth.

3

D	S	T	K	N	U	K	T	M	T
D	N	A	B	E	Z	A	X	G	N
K	S	A	T	E	L	L	I	T	E
U	H	T	Z	N	T	P	F	V	L
K	W	N	A	A	A	R	B	Q	M
F	O	G	N	O	I	V	A	O	M
R	R	K	P	S	O	E	Q	C	B
E	A	S	Z	S	U	V	N	R	K
Z	A	A	W	D	W	O	I	G	J
S	I	G	N	A	L	S	D	C	M

4 Examples: satnav, car navigation, map reading while walking

## Lesson 6

1 **ground station dish:** used to track satellites in space from the ground; **orbiting satellite:** above the earth, sends and receives signals; **car satnav:** used when driving to new places

2 False, True, False, True

3 Examples: Video: storyboard, sketches, scripts; Poster: sketch plan; Report: plan for headings and subheadings, sketches; Presentation: storyboard, slide plan

## Lessons 7 and 8

1 a) Mobile phone networks are needed to talk to friends and family when out of our homes.  
b) Satellite networks are needed to find out exact locations on the planet.

2 Examples: be careful when handling and using scissors, remember to put lids on glue, keep modelling areas tidy, support models if they are gluing, keep your hands clean

3 word processing software, presentation software

4 Examples: Mobile phone mast: supports, scaffold, dish, transmitters, mast, aerial; Orbiting satellite: dish, solar panels, aerial; Ground station dish: mast, tower, base, dish, motors

## Lesson 9

1 Examples: Mobile phone: phone masts, underground wires, mobile phones; Satellite: users, ground stations, satellites

2 Poor, Useful, Useful, Poor

## Lesson 10

1 A

2 and 3 Student's own answers

## End-of-unit assessment

1 C

2 C

3 B

4 A

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