



# **Make Your Own Museum in a Box**

INSTRUCTION MANUAL

Hello.

Some people think museums are boring. Some definitely *are* a bit boring, perhaps because the spaces we are allowed to see are static. Treasures are under glass or have a sign that says **DON'T TOUCH.**

Objects, so full to the  
brim with stories,  
are described with  
tiny labels. A power  
object used in daily  
work for years by a  
healer in  
KwaZulu-Natal is  
reduced to “Pot” in a  
colonial catalogue.

We can do better.  
**You** can do better.



**Good**

**luck.**

# You will need:

- **Camera**
- **Microphone**
- **Computer**
- **Printer** (maybe)
- **WiFi**
- **NFC stickers**
- **Yellow WiFi card**
- **Box**, obvs!

## **IMPORTANT:**

**Be certain you have permission to use things you didn't create.**

# To do:

## **What's your Collection?**

Choose your objects  
Photograph, 3D print, or make your objects  
Create your Collection on Heart  
Upload object photos to Heart

## **What's the Story?**

Write the story about each object  
Record your audio  
Make your audio files (.MP3 or .WAV)  
Upload audio files to Heart

## **The Box**

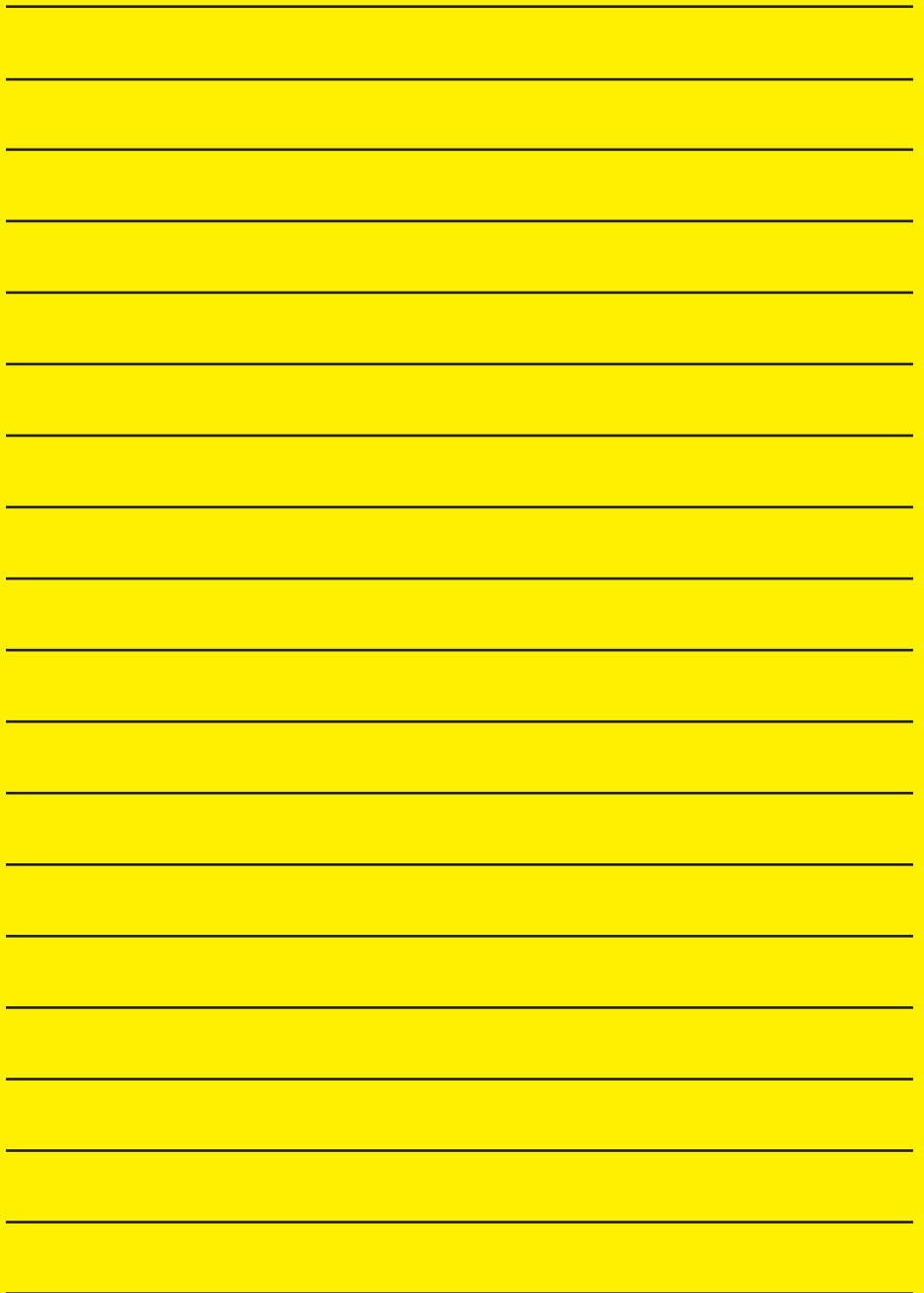
Get your Box on WiFi  
Add your Collection to your box  
Write NFC Stickers  
Yeah!

[heart.museuminbox.org](http://heart.museuminbox.org)

is where you organise your Collections

[box.local:1880/prints](http://box.local:1880/prints)

is what's on the Box & where you write Stickers



PART 1

**What's**

**your**

**Collection?**

# Le AIM o' La GAME

- **9 things**

A small collection is good for everyone.

- **60 second story**

Ignore at your own peril.  
Zzzzz.

## **Possible approaches**

1. Choose a **subject** you're into,
2. Find a **set of actual physical things** you think are interesting, or
3. Steal a **great story** and find things to improve it.

# Devising the story of your collection

*Sketching, linking, searching, interviewing*

Think through these questions:

- How would you introduce this as an exhibition?
- How does your set of objects fit together?
- What's the connective tissue?
- Do they contrast with or support each other?
- Do they each stand alone too?

## Choosing your objects

*Locating, matching, defining, categorising, grouping*

Collect your objects together. Have a look at them all. Maybe rearrange them a bit. You'll need to describe each one in more detail, take a photo, and make some kind of physical version for people to boop.

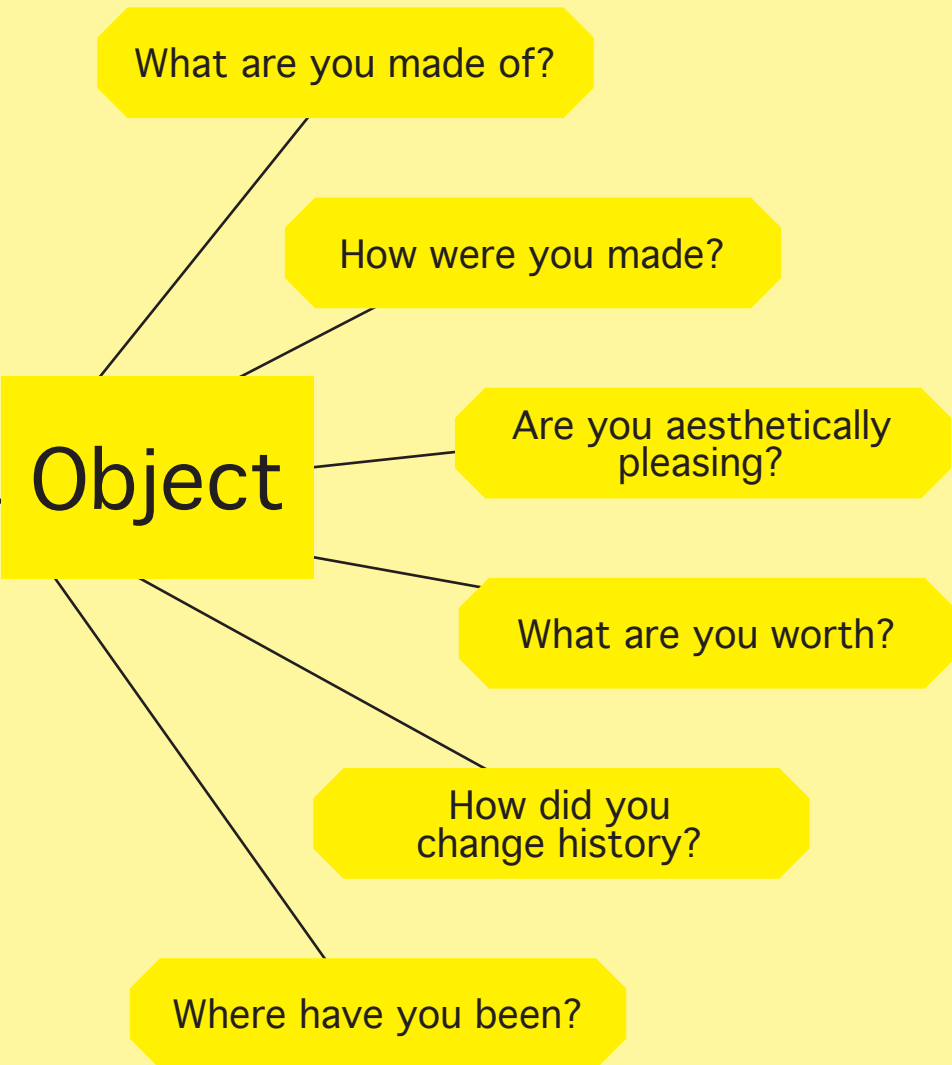
Try having a look at the internet if you're stuck for ideas. Lots of museums give their images to the public domain these days, so there's tons to see and reuse. [Try the Rijksmuseum, The Metropolitan Museum of Art, or Flickr Commons.](#) For 3D, try [Sketchfab for Museums](#) or [Scan the World](#).

## Researching your objects

Imagine what the things in your Collection have seen... Where they've been, what they've heard, who's touched them before you.

# Questions for your object





Don't forget to find out some actual, bonfide facts, and maybe don't just use Wikipedia - take some time to look at original sources.

What do you want your Collection to show people? Are there less likely angles can you explore? Could you fabricate facts and have someone believe it?

## ***Welcome to History.*<sup>1</sup>**

### **Your Catalogue**

A catalogue is your list of all your objects. Every museum in the world has a catalogue like this. Some are bad (not complete, not up to date, incorrect, prejudiced), and some are good (alive, comprehensive, multilingual, interconnected).

What will your catalogue be like? How can you write it so it can be understood 1,000 years from now? Or by someone else, in even just 10 years?

Here at HQ, we use a spreadsheet to catalogue every collection we develop, so you might like to try that. A spreadsheet can act like a very simple database. You can design whatever data structure you like to describe your objects, and some common descriptors we see

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1 This is a joke. But, history can also be biased or untrue!

are Title, 2D-or-3D, Description, Tags, Place, Date Created - things like that.

It's good to be detailed when you're creating your object database. You can also describe objects in different languages, and try to use commonly-used names for people or places. If you're interested in databases, you might like to investigate concepts like **Linked Data**, or explore the massive online **Wikidata** system. (Warning: that's getting pretty nerdy.)

## **Digitising your Collection**

The simplest way to digitise an object is to photograph it. If it's a three-dimensional object, you might like to try making a 3D model of it.

You could also make a physical model of something. If you're interested to try photography or photogrammetry, here are two good online resources to get started:

### **Simple \$1 Photostudio**

How to make a simple, effective photostudio for next to nothing!

### **3D photogrammetry setup by Tom Flynn**

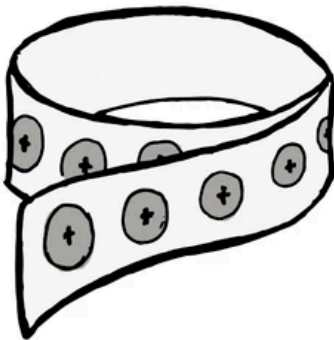
Illustration showing lighting/arrangement of a photogrammetry setup

## Using original objects

You can totally use things you find, like a oak leaf, or things you make, like a cardboard Apollo 11. Just take a photo for the website so other people can see it too.

Ready to create your collection digitally now? Great. Just head for [heart.museuminbox.org](http://heart.museuminbox.org).

That's where you organise your collections, and explore everyone else's.



## **Hooking it all up**

The best bit about Museum in a Box is being able to choose what you want to hear more about, picking it up, and booping it. What are people going to boop?

## **Postcards**

We normally make our postcards at A6 or A5 size. It's helpful if they're sturdy too, so you might consider sticking them to some cardboard or even laminating them. The back of the postcard is a second surface too, for extra info like what it is, where it's from, or even a transcript of your audio story. Leave room for your 2.5cm diameter sticker in any layout, and the stickers are best in the middle of your card.

## **3D prints**

The size of the 3D prints you make is really up to you and how much printer goop you have. You'll also need a good surface on the print somewhere for your sticker. Sometimes we add a plinth just for this!

## **Your NFC stickers**

Each of your objects will need its own sticker. When you place it don't forget about how the object balances. You can also reuse and rewrite stickers later, or buy more from the shop.

*“The difference  
between the right word  
and the almost right  
word is the difference  
between lightning and  
a lightning bug.”*

**MARK TWAIN**

PART 2

# **What's the Story?**

The objects or cards are lovely and very important, but the centre of the experience of Museum in a Box is the **story**. We've found that it's useful to keep your audio tracks relatively short. Everyone gets bored after a minute or two. Think about how you can use different sound layers to communicate background information about the setting too, for example, bird calls from the place where the story is set adds great, accurate colour.

## **The Script**

*Editorializing, explaining, editing, composing, reviewing*

We usually use a shared Google document to draft and edit our scripts, and we've also developed the Museum in a Box Content Guidelines for museums we work with who are writing their own stories. We've put the guidelines at the back of the manual for you.

Here's an early version of our Greek Gods & Goddesses collection so you can see something rough:

[https://heart.museuminabox.org/view\\_collection/381](https://heart.museuminabox.org/view_collection/381)

The best tip, hands down, is to make sure you read it aloud as you're writing it. That's the easiest way to make sure what you end up with sounds like something someone would tell you.

## **Actors!**

*Adapting, role playing, simulating, expressing*

How can you make your stories as engaging as possible? Do you have any thespians in your crew?

## **Recording**

You'll need a microphone to record your stories. At HQ we use a fancy one called a Zoom H4n Pro, but even a phone will do. It's worth making the audio recording as good as you can make it, so see if you can beg or borrow a decent microphone. And, make sure wherever you're doing it is nice and quiet.

## **Post-production**

Once we have our raw audio, we use a free program called Audacity to edit and refine our audio tracks at HQ. It should do most of what you need, and works on Windows and Mac: <http://audacityteam.org>

## **Sound effects**

It's amazing how our brains can use sounds to imagine what's happening. You hear the sound of a squeaky door opening... How does that make you feel?

We use a sound bank called [freesound.org](http://freesound.org) and choose tracks that are licensed for free commercial use.

At the end of the day, you'll need an audio file in .MP3 or .WAV format to upload to Heart for your Collection.

## **Reuse & Sharing**

We're huge advocates for open cultural resources at Museum in a Box. "When we share, everyone wins."

Creative Commons provides free, easy-to-use copyright licenses to make a simple and standardized way to give the public permission to share and use your creative work. Explore the different options here:

<http://creativecommons.org>

## **Helping people reuse your Collection**

Our goal is that any collection can be played on any Box in the world, with permission, so do consider using Creative Commons. And do make certain that you have permission to reuse anything you didn't create.

## **Add a Collection to heart**

Go to [heart.museuminbox.org](http://heart.museuminbox.org) and log on.

Hover over 'Your stuff' in the menu bar and select 'Collections' from the drop down menu.

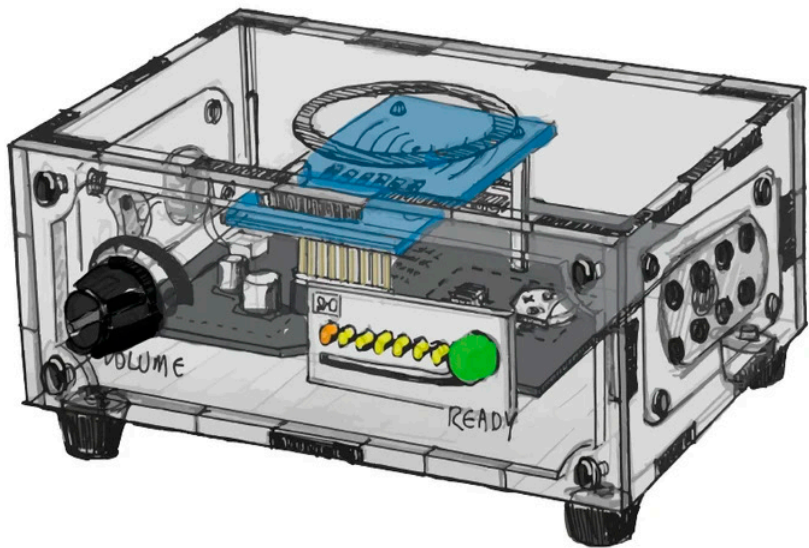
Click 'Create a new collection'

Fill in the form for each object you want to add to your box

For more detailed instructions visit

[heart.museuminbox.org/faq](http://heart.museuminbox.org/faq)

*Why* is your  
favourite story  
your favourite  
story?



PART 3

# **The Box**

## Turn it on

Each Box comes with a power cord. You might have to find the adaptor for your country. There's a power port at the back.

You'll know it's ready to use when it says READY. There should also be an illuminated big green light on the front.

## Getting your Box on WiFi

Please do this soon. You'll need your Box online to add your Collections to it. And it's also handy because you can get software or content updates, and send boops back to HQ.

- Make sure your Box is on
- Boop the yellow WiFi card
- Follow the instructions!
  - Join a WiFi network called "MuseumInABox" using your phone or computer.
  - Show the Box which WiFi network to join. This can be fiddly if you're on a complex network.

Problems?

Visit [heart.museuminbox.org/faq](http://heart.museuminbox.org/faq) for troubleshooting tips

Now is a good time to run the pink update card and check for the latest software.

# Write your NFC Stickers

## *Integrating*

OK. Let's check you're ready. You need:

- Your Collection added on the Heart website, every object with an audio file ready to go
- Your Box turned on, and on WiFi
- An NFC sticker for each of your objects, hopefully attached

Right. Woo!

OK. With all that stuff ready, go to your Collection page on Heart. There should be a link to Add to your Box.

Follow the bouncing ball.

## **Updates**

Whenever you add a new collection to your box you will need to boop the **pink** updates card. This will download all the audio files from heart to your box.

**NB** If you have a lot of objects or a slow internet connection this can take a *really* long time. Making a brew at this step is recommended.

The updates card will also prompt your box to check all the boop logs have been uploaded to Heart. Finally it checks for any software updates.

When it is all complete the box will let you know and it's time to write those stickers.

Find your box on Heart

Click 'Write Stickers for your collection'

You'll get to a screen that has an image of each of your objects on it, with a corresponding WRITE button.

1. Find the object on the screen
2. Place the object on the Box
3. Hit the object's WRITE button on the screen
4. Wait for confirmation from the Box

**5. PARTY!**

Yes.

Done!

Next?

***BOOP.***

# Museum in a Box

# Project Ideas

*Ages 5-9*

## **Mystery Objects**

Gather up a collection of nine things in your house that you find interesting or did not know about before. Take a photo of each thing and tell us about them.

## **Nature at Work**

Take a walk somewhere and make a collection of nine things that are great examples of the kinds of things you saw (leaves, flowers, etc). Take a photo of each thing and tell us about them.

## **Museum of Me**

Write your own oral history by drawing or taking photos of your life for nine days. Describe what you're up to and things you're thinking about.

*Age 10+*

## **People I Know**

Create an oral history by asking nine people you know

about their lives. Be sure you get permission to take their picture and post their story online for others to see.

### **My Favourite Foods**

What foods or meals do you enjoy making or eating? Are there special meals that are traditional in your family? Have you discovered any new foods lately?

### **Nine Stories, by Me**

Write nine stories and illustrate them. Make a collection by recording the short stories and connecting them to your illustrations.

### **Favourite Museum Objects**

Find an online museum or exhibit and pick nine objects. Research them and draw pictures of the objects to create your own exhibition.

### **My Neighbourhood**

Take a walk in your neighbourhood and take nine pictures that best illustrate where you live. Tell us why you picked those pictures and what they mean.

### **The Junk Drawer**

Pick nine objects from that drawer where all the forgotten widgets, geegaws, and lost pen lids live at your place. What can you find out about them? How could you give them a new life or use?

# Museum in a Box

# Storytelling

## Object Scripts

- Know who you are writing for, and the context where you'll use the Box.
- Would it be more interesting to open with a question? If so, consider a "what" question, not a "why".
- Try not to just list facts, but tell a story. Consider how the whole Collection is interrelated, and remember, there's no guarantee the objects will be used in a particular sequence.
- Make sure you read your script aloud. Even better, read it to someone in your target age range and see if they like it, and understand it.
- Pick one thing to focus on and make that the star.
- Keep it to around 60 seconds, unless it's gripping. That's about 150 words.
- Could writing in first person work? (We've found kids like that narrative style.)
- Consider having more than one voice speaking on a single track, a conversation.

# Tips

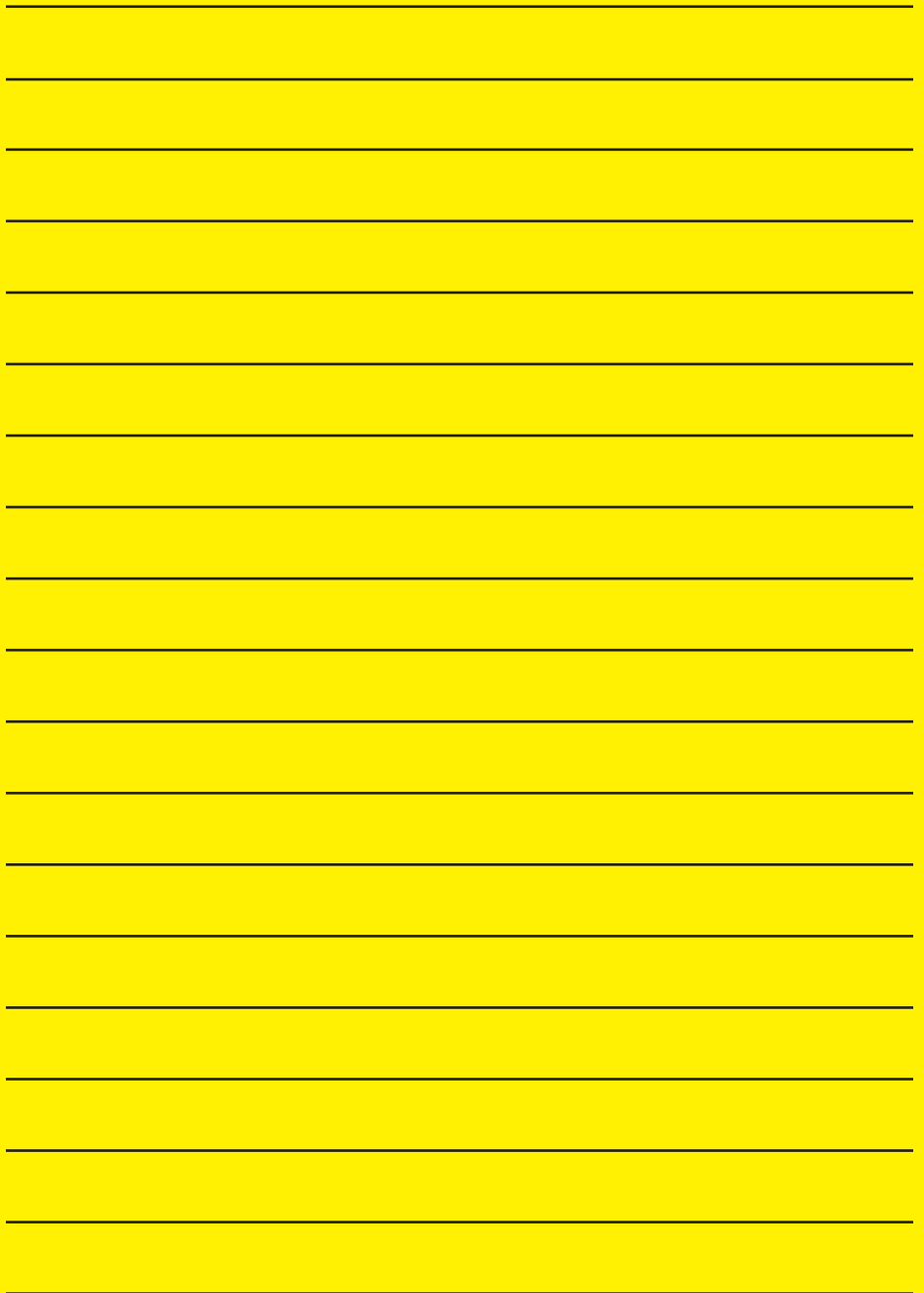
## Sound

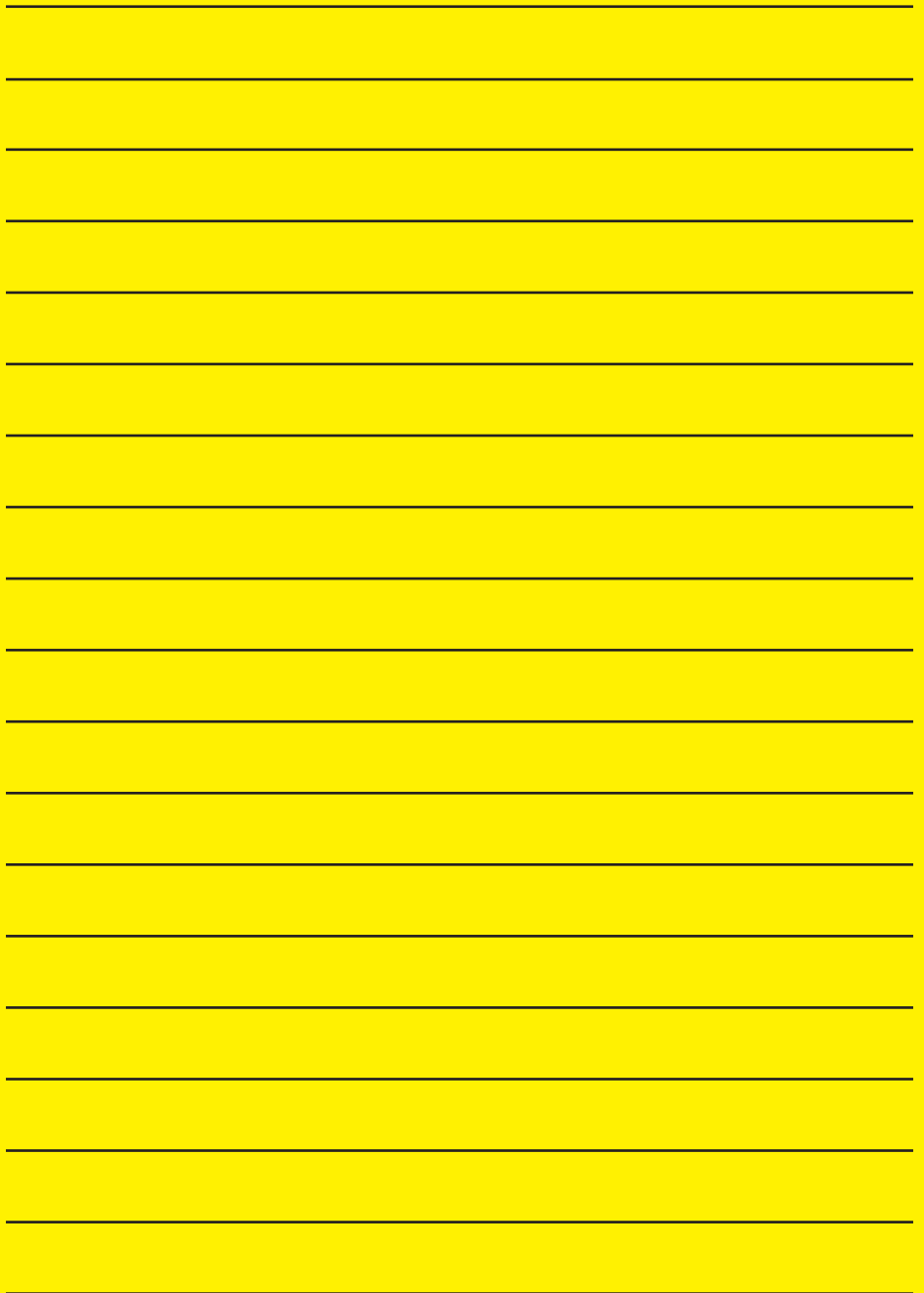
- What if some cards don't speak any words at all?
- You can play anything audio, just a moody sound, or piece of music from the same period as the object, or an evocative sound effect. (A mix of these in one set is nice.)
- What other audio layers could add informative colour to your script?

## The Other Side of a Postcard

- What other information will be useful to read, while listening or later?
- Give people links to further information
- You might like to include some basic object metadata too, like how big it is.
- Keep information short and sharp. 50 words max.
- This is a nice place to give credit where it's due. Make a note of where you found your images or extra audio.

**WHEE!**





# BOOP!



[museuminabox.org](https://museuminabox.org)

LAST MODIFIED: 30 September 2024 2:28 pm