

RASPBERRY FURBY™ MANUAL

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Congratulations on becoming the proud¹ owner of a "new-ish"^{2, 3} Raspberry Furby™! The following is a summary of instructions for how to operate your Raspberry Furby™. Please keep in mind that, should you find yourself in need of help, you are always welcomed⁴ to call our techsupport center⁵. We hope you enjoy your many adventures⁶ with your Raspberry Furby™!



Date: January 7, 2020.

¹Don't lie... You know you are. This is a boss ass present.

²**New-ish** - [noo-ish] - adjective: The act of being somewhat new.

³Disclaimer: We here at Genius Enterprises™ do not claim the Furby to be new, the use of the word "newish" here simply refers to the integration of a Raspberry Pi in a Furby. Further more we claim no responsibility should the Furby break, catch on fire, happen to be infested with bugs, summons an undead army to exact revenge on humans in response to the cruelty of its former owner, or any other malfunctions due to age.

⁴That's a lie

⁵It wasn't an accident that we left the number out of here.

⁶Like Dumbledore enjoyed his last faculty meeting with Snape. Wasn't that just a pleasant meeting... :)

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1. SOME BASIC INFORMATION

To begin with, you'll probably want to know a few things about your Raspberry Furby™. Well, your Fuby was found by one of our experts⁷ deep in the amazon rainforrest⁸ in the arms of a dying shawman who claims to have cursed...⁹

After the intern brought us the Furby from the rainforrest or w/e, we went right to work on it. We analysed it, catalogued it, and then we tossed it in the creep junk pile. But then creepy shit started happening so we did this thing with it and now it's yours. So yea...

Other than that, the default username and password are

UN: XXXXXX
PW: XXXXXX

If you want to use SSH¹⁰ or VNC¹¹ you will need to know both of those.



⁷Ok, he was really more like an intern.

⁸Why he was there, we have no idea... We sent him to Starbucks to get us all coffee

⁹I'm sure the rest of the story was "important," but our intern died before he could finish

¹⁰Secure Shell, is a form of remote access using Command Prompt, Terminal, ect.

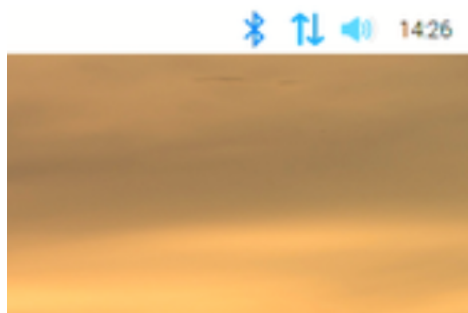
¹¹Virtual Network Computing, is a form of remote access that allows you to see and control what is on the screen of another computer.

2. GETTING STARTED

Well,... plug everything in. Duh.

The End¹²

Oh and you're probably going to want to setup WiFi. To do that, locate the blue arrows pointing up and down in the top right, click on them, and setup your WiFi account accordingly.



¹²If you want to use Voice Command, you're going to have to plug the WebCam in too.

3. HOW TO USE VOICE COMMAND

...you use your voice, and give it commands.

NOTE: The web camera must be plugged in for Voice Command to work¹³

To give your Raspberry Furby™ commands, start by saying "**Furby...**"¹⁴ this initializes the code to listen by letting it know you're saying something to it. As a default, you can use the following commands:

- "**email**"¹⁵

(1) This will be prompted by a request for whom you'd like to send it to. You will have to say the entire address.¹⁶

(2) You will then be prompted what it should write

(Ex)

"Furby, send an **email**."

PROMPT

"scooby.doo.234@hotmail.com"

PROMPT

"Would you do it for a Scooby snack?"

- "**definition...**"¹⁷

This will look up the definition of any word you ask it.

To use simply say, "**Furby... definition...**" and whatever the word you interested in.

(Ex)

"Furby, what is the **definition** of, *mystery*?"

- "**time...**"

This will give you the current time.

(Ex)

"Furby, time"

¹³You could alternatively replace the web camera with a mic.

¹⁴You can alternatively ask it, "**Can you...**"

¹⁵This may be buggy as hell.

¹⁶What did you expect? I only had like a week to write the code on the backbone of old code, build the Furby, setup the family messaging interface, and write these instructions

¹⁷similarly you can ask it for **synonyms** and **antonyms**

- **"show me where a city is"**
CURRENTLY NOT WORKING

- **"Google..."**¹⁸

This will Google w/e you ask it

To use simply say, "**Furby, Google**, and whatever the word you interested in.

(Ex)

"**Furby**, please **Google**, *Scooby-Do, Where Are You.*"

- **"find..."**

This will search Wolfram Alpha for w/e you ask it

To use simply say, "**Furby, find**, and whatever the word you interested in.

(Ex)

"**Furby**, please **Google**, *Scooby-Do, Where Are You.*"

- **"calculate..."**

This will calculate w/e you ask it

To use simply say, "**Furby, calculate** and whatever you want calculated

(Ex)

"**Furby**, calculate, $(4 \times 5)^3$ "

- **"tell me about..."**

This will search Wikipedia w/e you ask it

To use simply say, "**Furby, tell me about** and whatever the word you interested in.

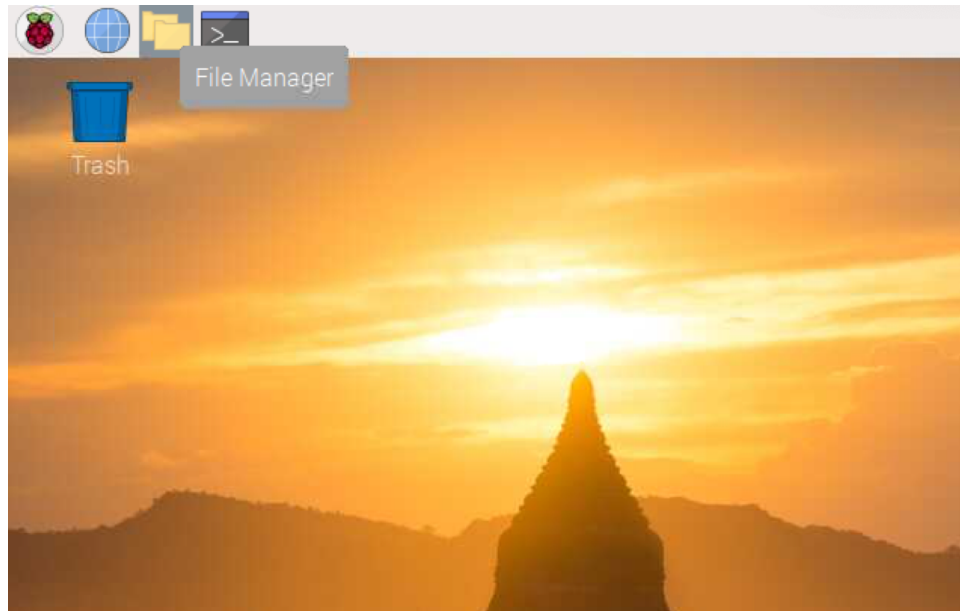
(Ex)

"**Furby**, tell me about, *the Mystery Machine*"

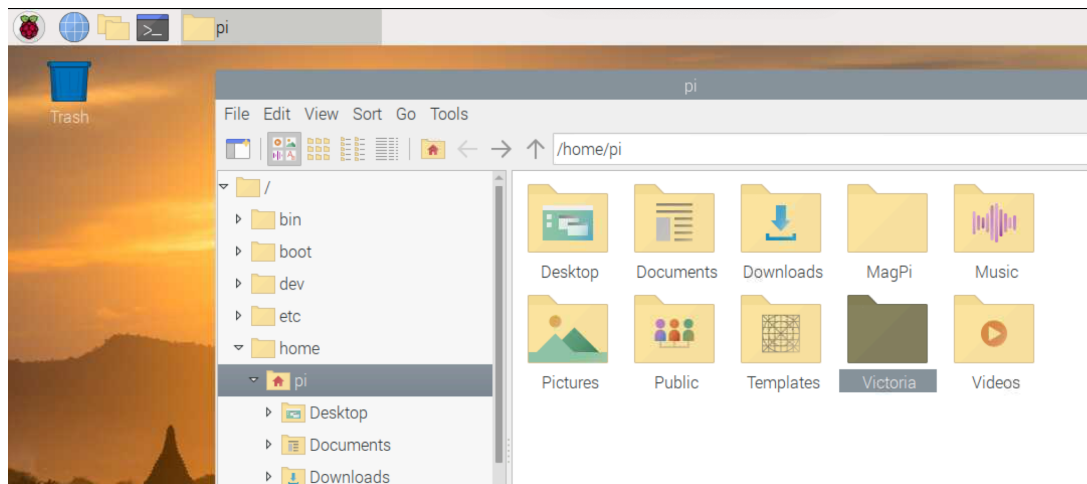
¹⁸Could similarly ask it to "**search...**"

4. HOW TO LOCATE THE VOICE COMMAND FILE (ASSISTANT.PY)

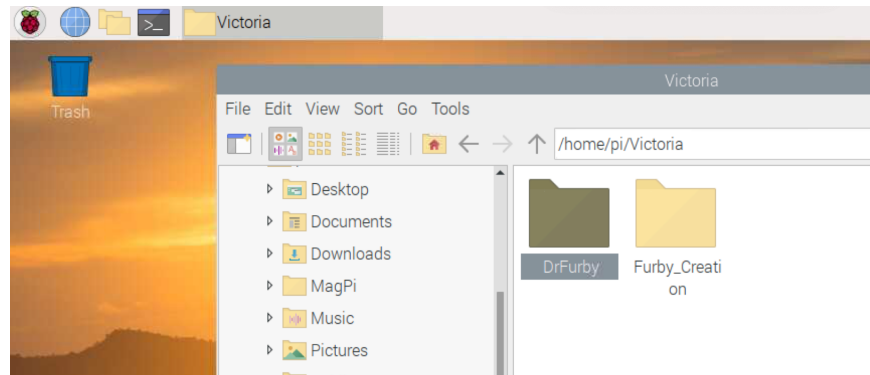
- (1) Go to your home screen
- (2) At the top left, in the task bar, you will find 4 icons, the 3rd one from the left is a pair of folders. Click it.



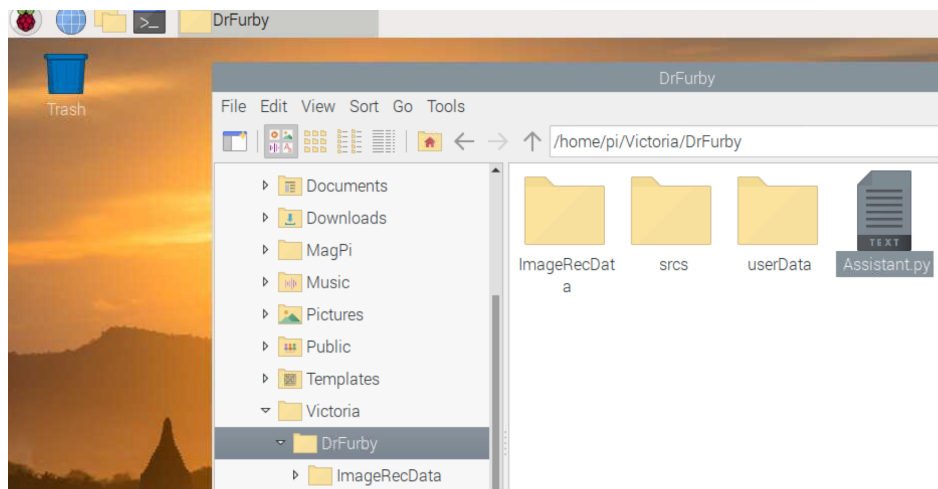
- (3) Click the file labeled, "Victoria"



(4) Click the file labeled, "DrFurby"



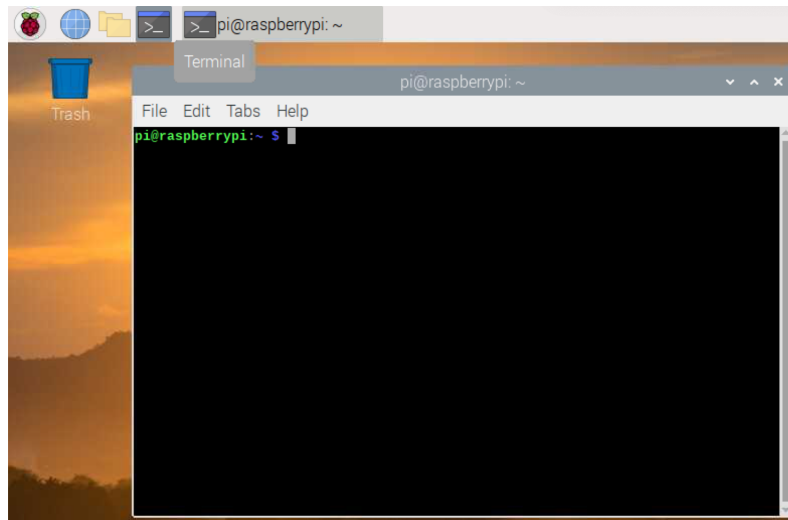
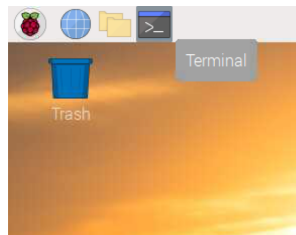
(5) The file containing the code for the Voice Command is the file labeled, "Assistant.py"



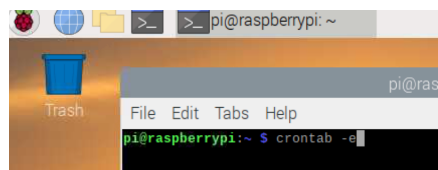
5. HOW TO OPEN TERMINAL AND TURN VOICE COMMAND ON OR OFF

To disable or enable Voice Command you'll have to open, "Terminal" and change a single line in "cron." The following is a step by step for how to do that.

- (1) Open "Terminal" by locating its icon in the top left of your screen in the "Task Bar" and clicking on it.



- (2) Next, once you've got Terminal opened type, "*crontab -e*" and press "enter."



- (3) Once you've done that, you should be met with a screen that looks something like this.

```

pi@raspberrypi: ~
GNU nano 3.2 /tmp/crontab.f4xR7j/crontab
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# Get Help:  F1 Get Help  F2 Write Out  F3 Where Is  F4 Cut Text  F5 Justify  F6 Cur Pos
# Exit:      F7 Exit      F8 Read File  F9 Replace  F10 Uncut Text  F11 To Spell  F12 Go To Line

```

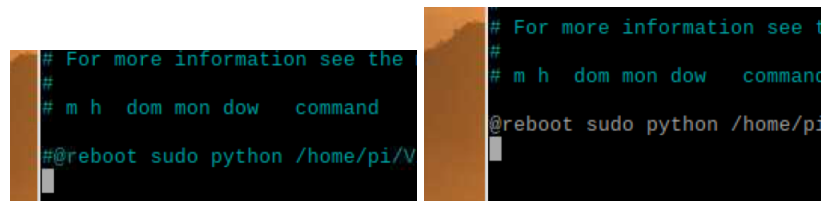
Scroll down until you find the line that reads:
 "@reboot sudo python /home/pi/Victoria/DrFurby/Assistant.py..."

```

pi@raspberrypi: ~
GNU nano 3.2 /tmp/crontab.f4xR7j/crontab
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
@reboot sudo python /home/pi/Victoria/DrFurby/Assistant.py >/home/pi/Victoria/DrFurby/log.txt
#
# Get Help:  F1 Get Help  F2 Write Out  F3 Where Is  F4 Cut Text  F5 Justify  F6 Cur Pos
# Exit:      F7 Exit      F8 Read File  F9 Replace  F10 Uncut Text  F11 To Spell  F12 Go To Line

```

- (4) If you want to disable Voice Command, place a "#" at the beginning of the line(the line may change colors when you do). Otherwise, if you want Voice Command to be enabled, make sure the line does not begin with a "#". See the two images below for a reference.



6. HOW TO SETUP EMAIL WITH VOICE COMMAND

- To setup e-mail¹⁹, open the Assistant.py file²⁰ and scroll down to the about the 30th line of code.
- You will find a chunk of code that's been written into a block, with a header that reads:
 "...#### - CHAT - ####..."
- In that block replace everything that reads "ADD" with the relevant data and delete the "#" at the beginning of each of those lines.

```
##### ~ CHAT ~ #####
# Keys and other user specific information

# Delete the # and replace "ADD" with relevant entry

#pw = "Jane"
#add = "Doe"
#location = "Place"
#signature = '\n' + "Bamby" + '\n' + "This was written via her digital assistant"

# Math Feature
#client = wolframalpha.Client("KEY")

# Weather Feature
#API_key = 'KEY'
#owm = OWMM(API_key)
#####

##### ~ Image ~ #####
# Return to and fix
def PeepCounter():
    import cv2
    face_cascade = cv2.CascadeClassifier('ImageRecData/haarcascade/haarcascade_frontalface_defau
```

```
23 from time import ctime
24 from PyDictionary import PyDictionary
25
26
27 ##### ~ CHAT ~ #####
28 # Keys and other user specific information
29
30 # Delete the # and replace "ADD" with relevant entry
31
32 pw = "Jane"
33 add = "Doe"
34 location = "Place"
35 signature = '\n' + "Bamby" + '\n' + "This was written via her digital assistant"
36
37 # Math Feature
38 client = wolframalpha.Client("KEY")
39
40 # Weather Feature
41 API_key = 'KEY'
42 owm = OWMM(API_key)
43 #####
44
45 ##### ~ Image ~ #####
46
47 def PeepCounter():
48     import cv2
```

¹⁹Use a social email account not prone to having sensitive data set to it. It's always better to be safe than sorry.

²⁰See, "How to Locate the Voice Command File (Assistant.py)"

7. FAMILY ANNOYANCE APP™

Per the social contract that exists between brother and sister, I feel it is my duty... nay my privilege to inform you of a new special feature I've built just for your Raspberry Furby™, it's called the Family Annoyance App™.

The Family Annoyance App™ is the latest in cutting edge sibling warfare and family annoyance technologies. It allows members of a family to send each other messages at all times of the day. About to watch your favorite Amazon show?, "Hey Brat!" Maybe you were winding down for the day listening to your favorite Pandora station, "Your parents miss you."

Ah yes, gone are the days when you could screen your calls and texts claiming, "oops, sorry I missed your message. My phone must have been on silent." Yes... Such is the genius of the Family Annoyance App™.

"But surely there must be an off switch you," say... Nope. No off switch. Ha ha!²¹



²¹Incase you need tips on how to get even, <https://www.wikihow-fun.com/Annoy-Your-Siblings>

8. HOW TO USE FAMILY ANNOYANCE APP™

In the event that a message has been recieved, a series of lights will flash in the Furby's face. And you will have exactly 30mins to open said message before it returns the message back to the sender to inform them that you're being rude and ignoring their message...

Ok, that's not what really happens.

In the event that a message has been recieved, a series of lights will flash in the Furby's face, that part is true. To have it read those messages, say **"read messgaes."**

9. **HOW TO VNC INTO YOUR RASPBERRY FURBY™**

Watch: <https://youtu.be/DG366Hh15-k>

The same channel has other great tutorials on using and setting up Raspberry Pis.

10. **OTHER PROJECTS YOU COULD DO WITH YOUR RASPBERRY FURBY™**

(1) Alexa Assistant:

<https://www.instructables.com/id/Alexa-Assistant-With-a-10-Raspberry-Pi-Zero-W-and-/>

(2) RetroPi Gaming System:

<https://www.element14.com/community/docs/DOC-79282/1/raspberry-pi-zero-retro-gaming-system>

(3) Pirate Radio:

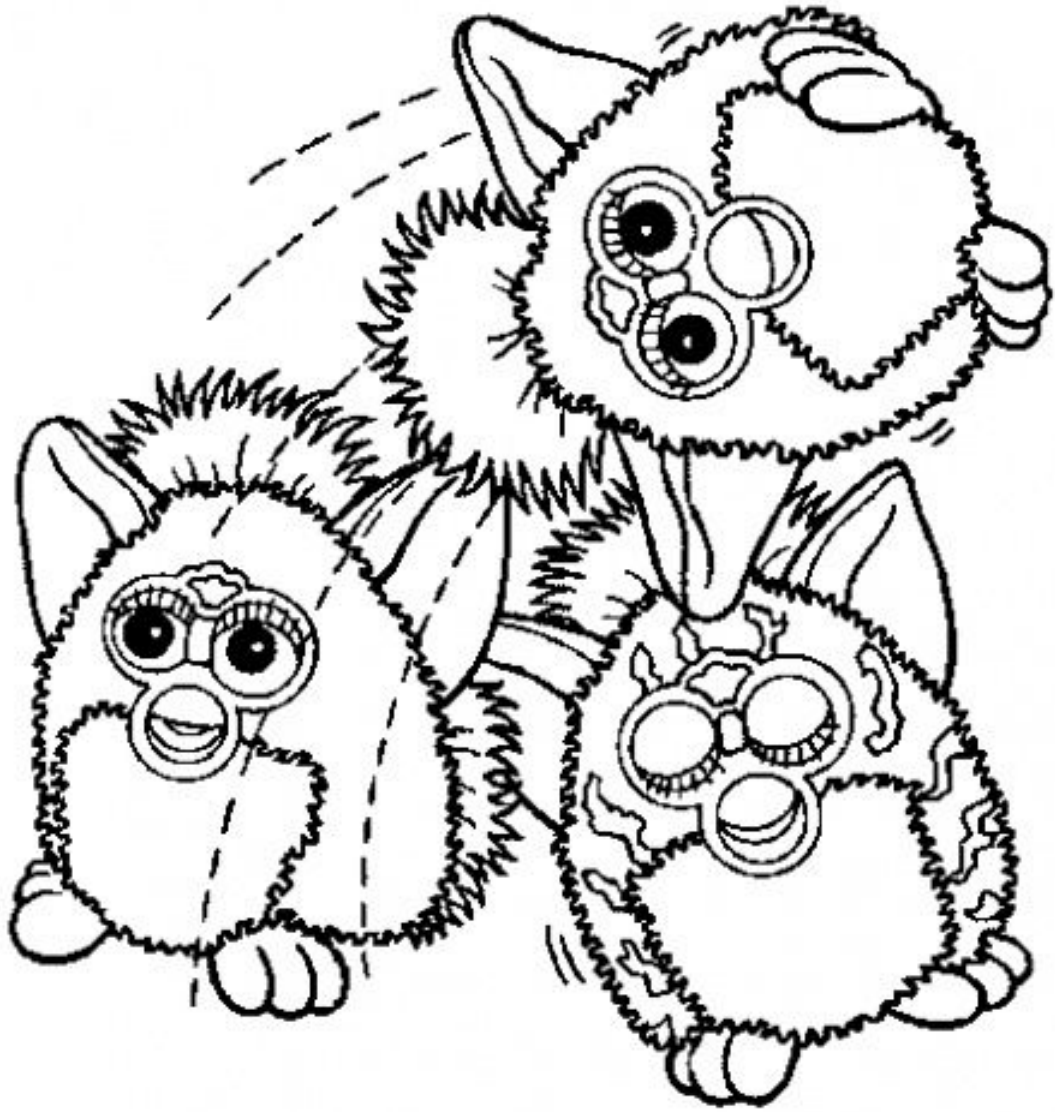
<https://makezine.com/projects/pirate-radio-throwies/>

(4) And so so much more(if you want to take the Furby apart):

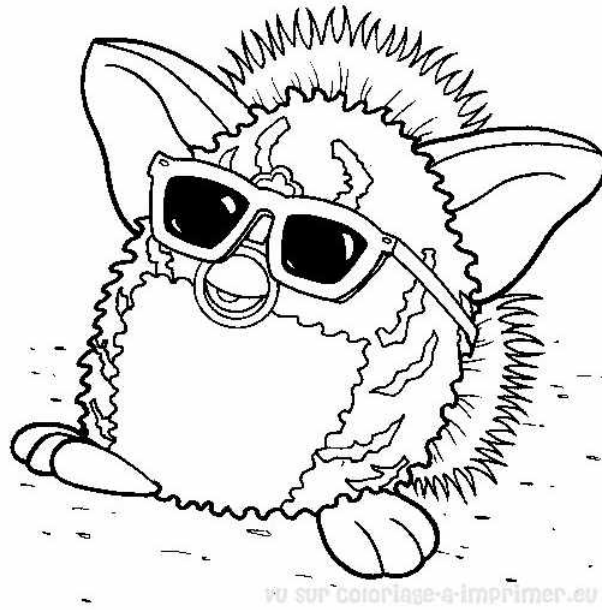
<https://hackaday.io/projects?tag=raspberry%20pi%20zero>

<https://www.instructables.com/howto/raspberry+pi/>

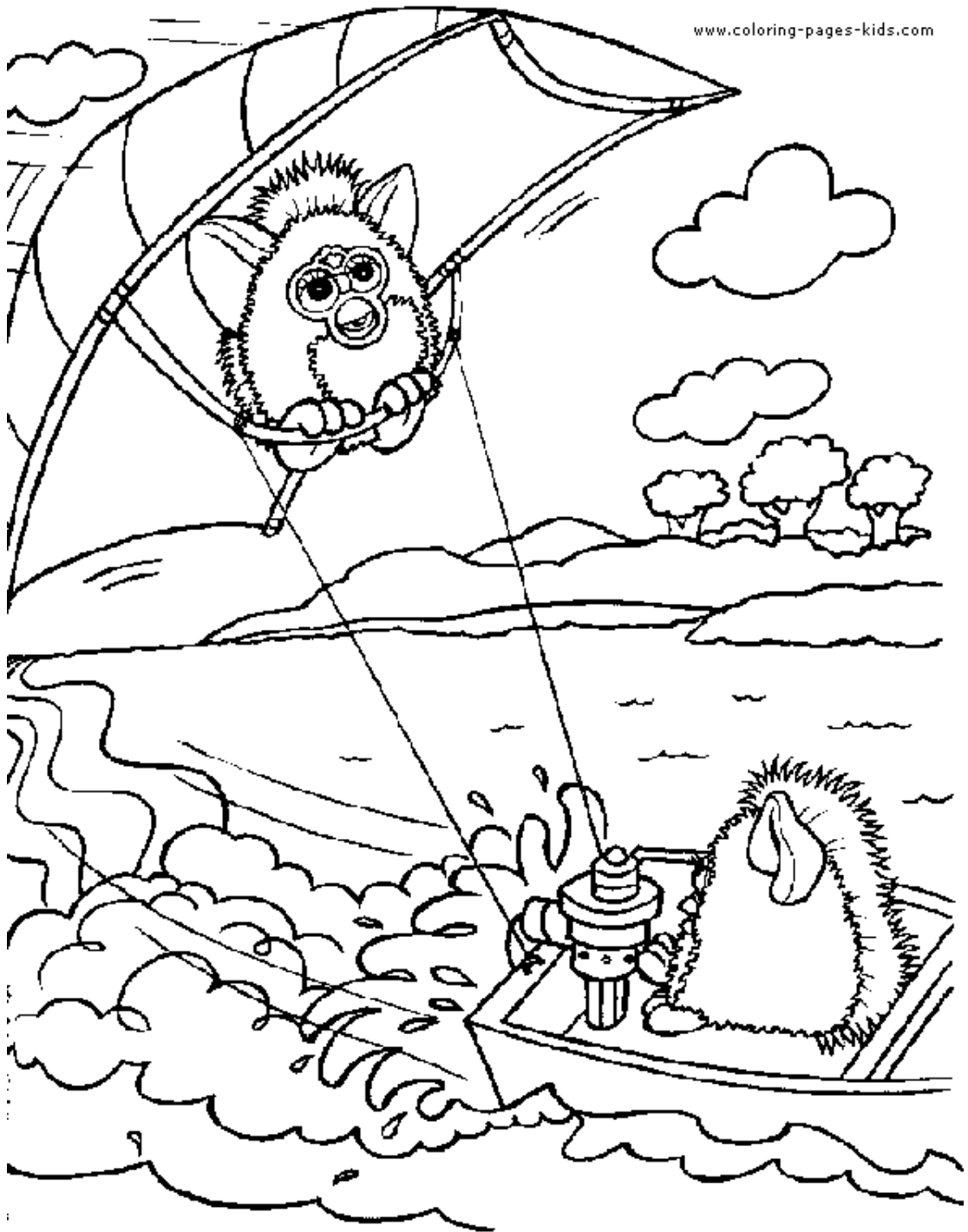
11. COLORING BOOK

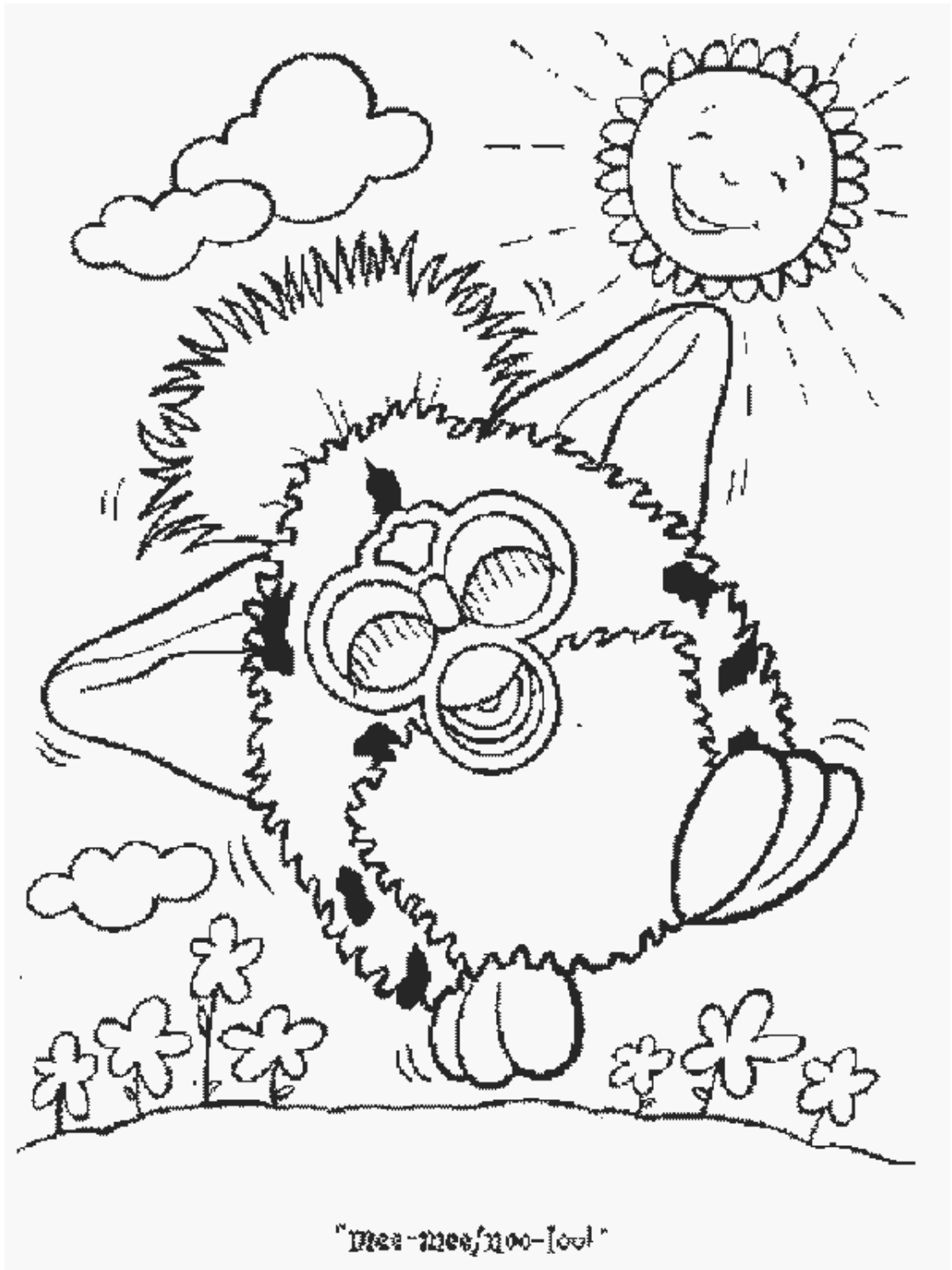


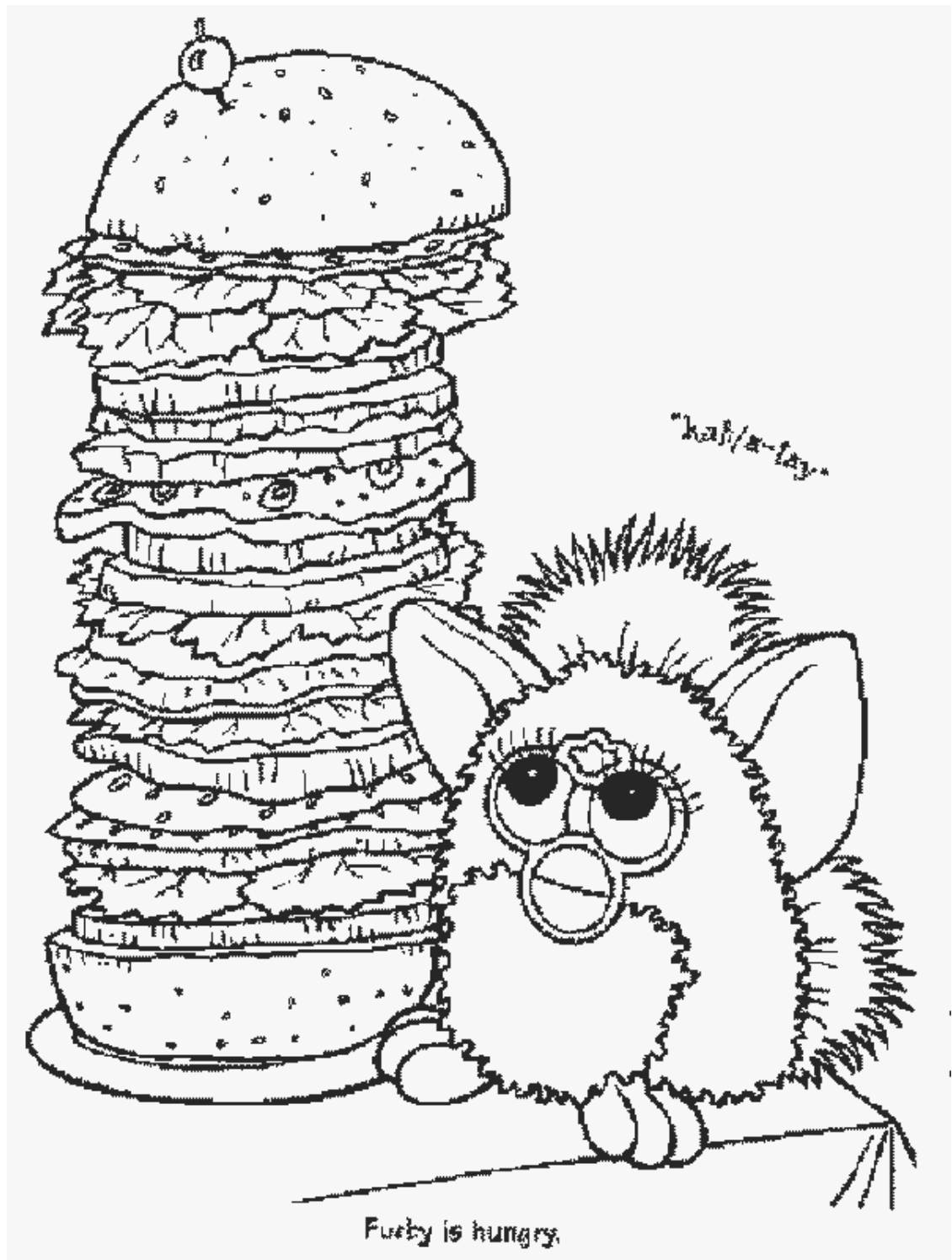




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