It's so cheap I can buy thousands of them for many kids!

> F you get bored of playing computer games why not try creating them yourselves? Programming is easy with the Raspberry Pi, a popular tiny computer that British schoolchildren are learning to use. Two of them have even been sent to space to carry out experiments!

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Editor's Note

Hi! The big story in the news recently is about a tai chi master losing a fight with a mixed martial arts fighter (MMA) in 10 seconds. The MMA fighter claims that traditional fighting arts are out of date and he proved that by winning the fight. But that

is not fair because tai chi is all about promoting health and harmony. In fact all of the old martial arts share these ideals and they also improve discipline, build up confidence and teach respect to our elders. Martial arts masters do not teach people to be arrogant and to see who is the best but to use their skills in the proper way such as to defend oneself. Turn to G05 to learn how you can learn this in karate.

MACAD



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• http://www.student.thestandard.com.hk

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Cover Feature

— Goodies

What do you

want to do with

a Raspberry

Pi?

Simon

I want it to control

a robot that feeds

me ice cream

while I am busy

playing video games!____

A pocket-sized computer

GO2

KIDS are great at using computers but if they knew how to program with one, they could create many fun projects. That is why the Raspberry Pi Foundation created the Raspberry Pi. It was launched in 2012 and over 10 million of them

have since been sold. It is smaller than a smartphone and only costs £30 (HK\$299). It does not come with **peripherals** such as a power supply or mouse so you have to recycle old items you can easily find in your home.

Coding made easy

THE Rasberry Pi comes with Python, a programming language that is simple to learn. You can then write code to do many fun things such as build games. Another piece of software you can use to create interactive stories or animations is Scratch (see below). This is even easier to use since you do not need to write code. You just use its drag and drop function. Best of all is the Raspberry Pi version of *Minecraft* that lets you write programs to change the way the game behaves such as making a player move faster. But do not use it to cheat!

Fun projects

THE best thing about this minicomputer is that you can do 'physical computing'. You can attach hardware to the Raspberry Pi and then program it to **sense** the environment. Many popular kids' projects include building a weather station to collect weather data, creating a **synthesiser** to make cool music or programming a robot. You can even make a fart **detector** or



set up a laser trip wire so you can pretend you are a jewel thief!

Space experiments

esa

WHEN the British astronaut Tim Peake flew into space in 2015 to go to the International Space Station (ISS), he took with him two Raspberry Pi computers loaded with programs written by British schoolchildren. Peake ran the programs to conduct tests and sent the results back to Earth. They included a **radiation** detector and a monitor to check the ISS's own life support system. Whoever said science experiments were boring?

_ peripheral (n) 外圍設備 ⊴ sense (n) 感應

Vocabular

synthesiser (n)合成器 detector (n) 探測器 trip wire (n phr) 地雷線 radiation (n) 輻射

