

Saturday May Ist TO CLASS!



<del>大家好!</del> WELCOME





kāi xīn de shāng xīn de shēng qì de 開心的 傷心的 生氣的 fán nắo de hài xiũ de jī dòng de 煩惱的 害羞的 激動的 jīng xǐ de chǔn chǔn de gān gà de

驚喜的 蠢蠢的 尷尬的



Activity l



情境題





dāng diàn huà xiǎng qǐ shí,wǒ huì shuō:「……」

當電話響起時,我會說:「……」



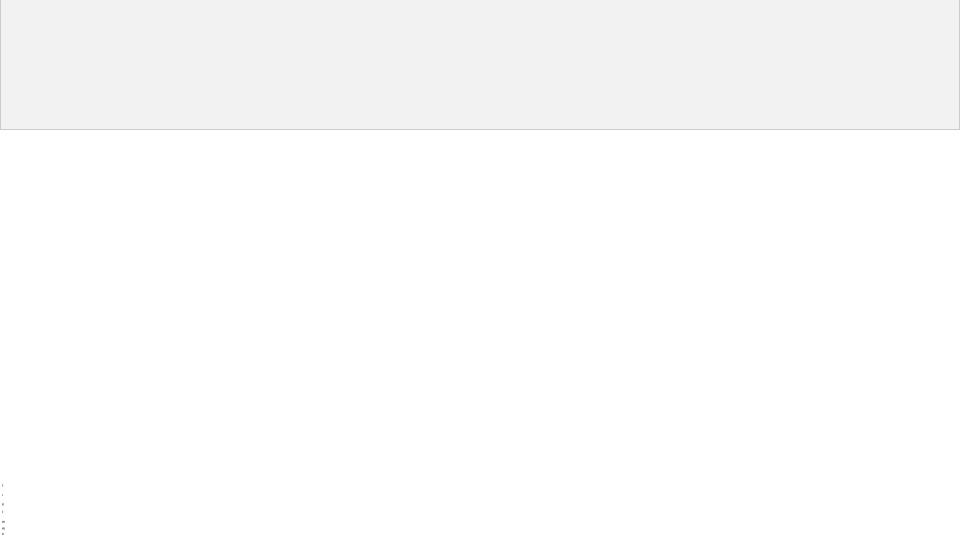


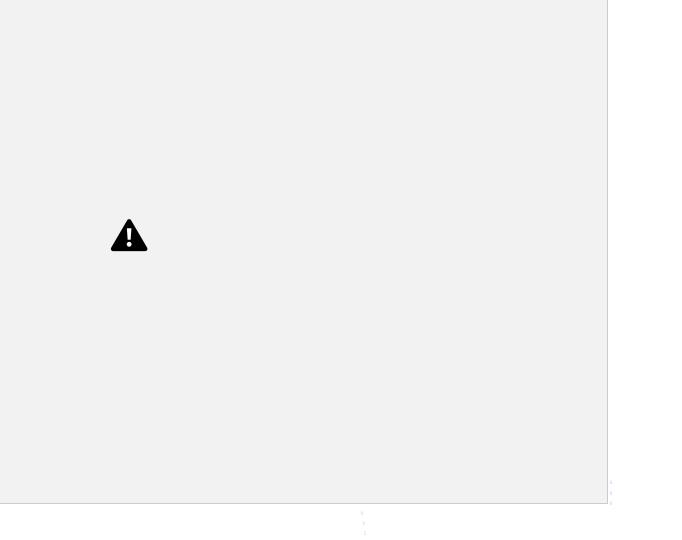
Activity 2

# 陳太太在家嗎?

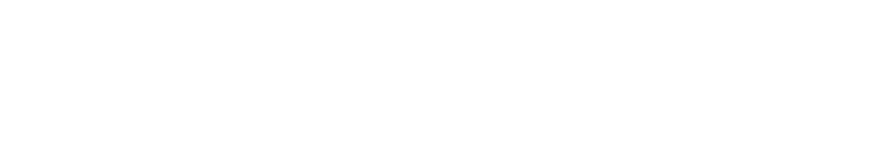
第十二課







## Activity 3



生詞

Cell phone, mobile phone
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Goodbye . See you again.

friend(s)

Wife, woman

Aunt



You (polite)

Hello

(to be) in

(when answering the phone)

Excuse me. May I ask you a question?

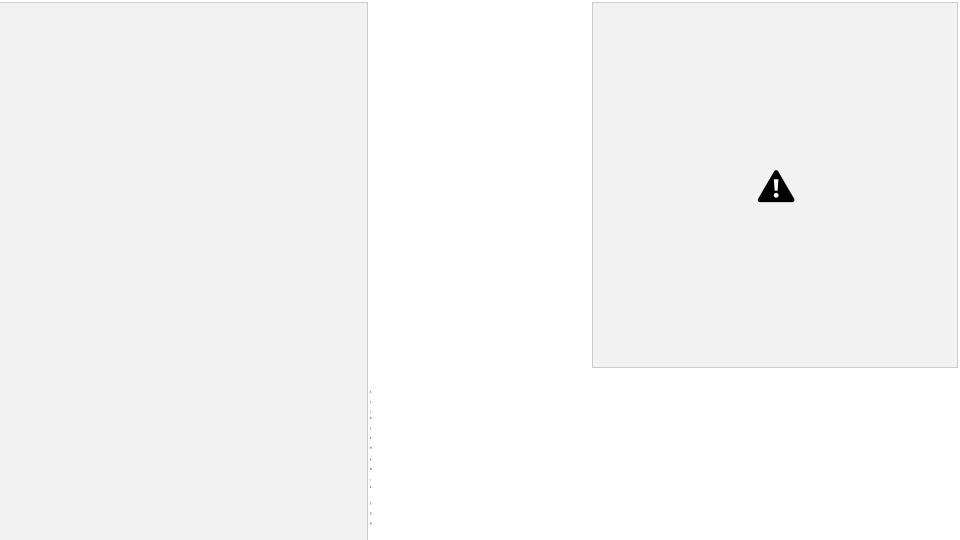


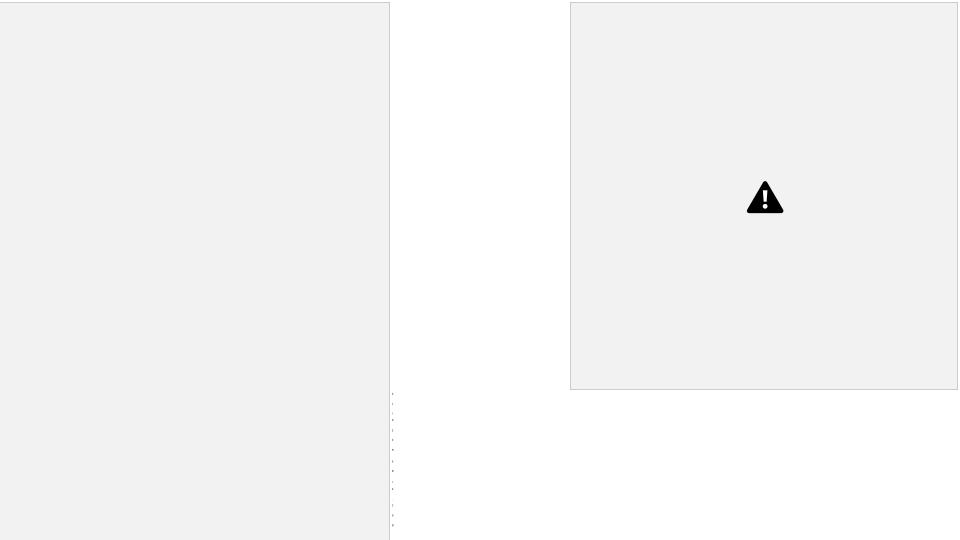


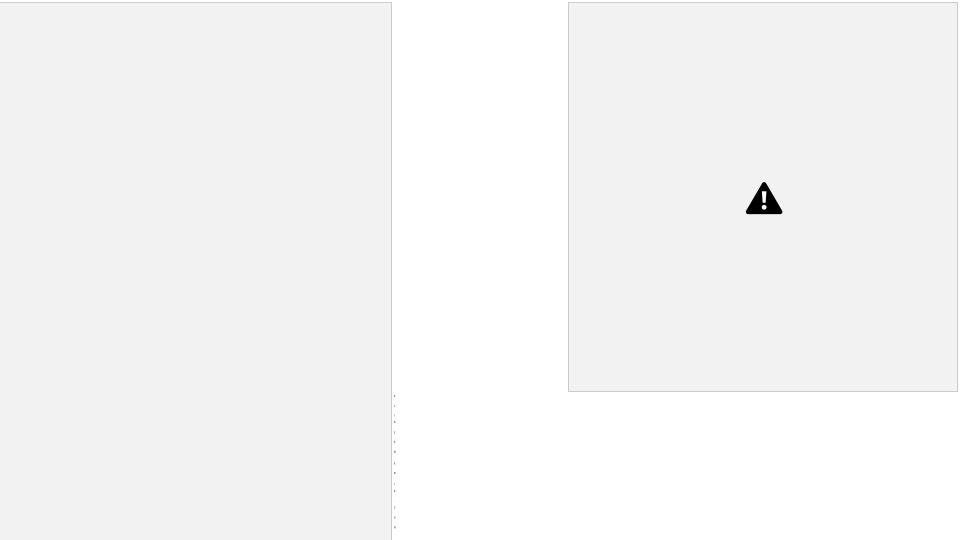


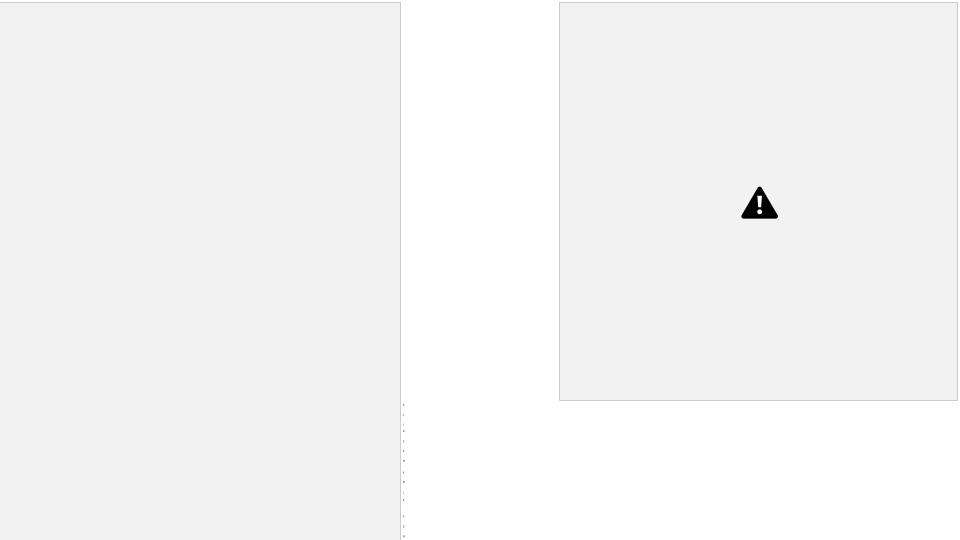
Activity 4

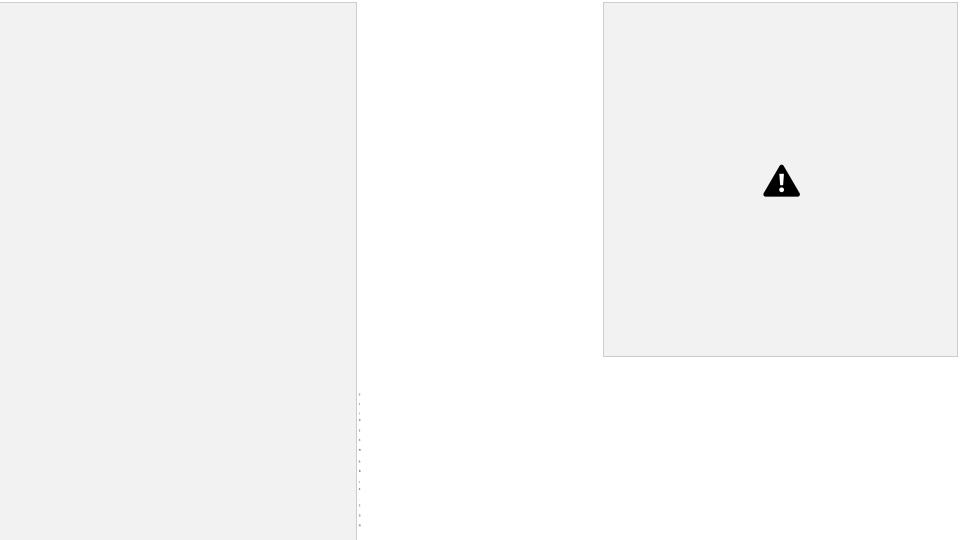
習寫漢字

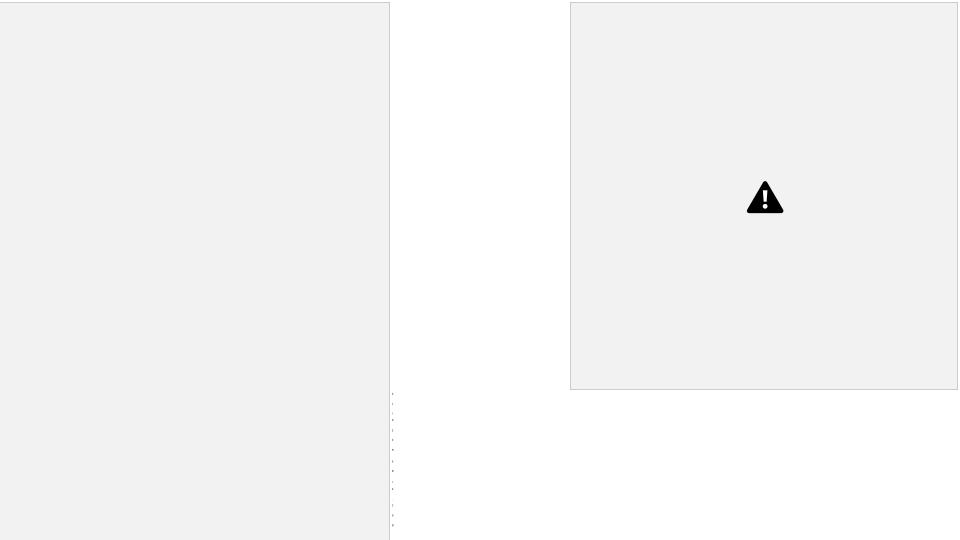


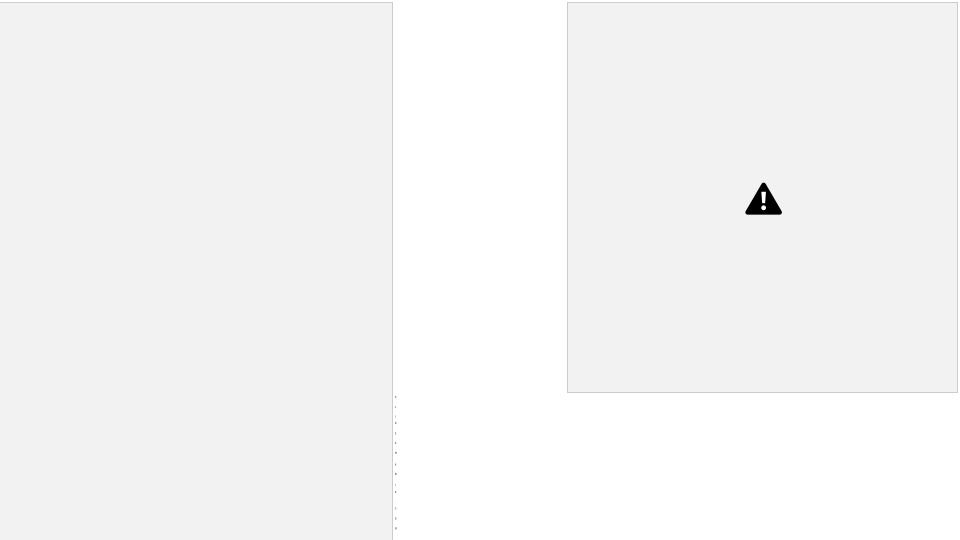














Activity 5

科學小實驗

### Cup phones 傳聲筒



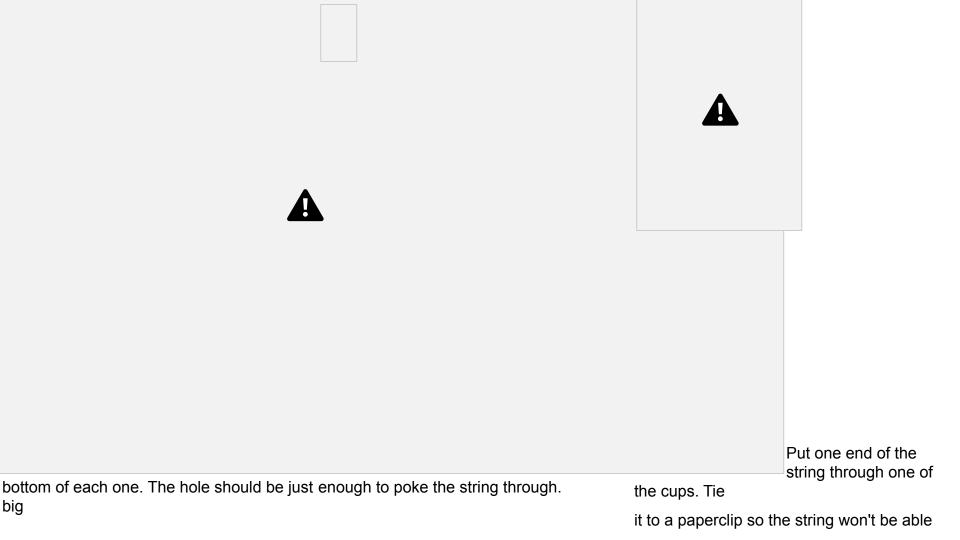
What you will need:

1. Two disposable cups (You can make

more than one set of cup phones. Try using cups that are different sizes and made from different materials, such as

be careful of sharp edges.)	所需材料:		
2. A long (about 4m to 5m) piece of string			
3. Paperclips	1. 兩個免洗杯(你可以做不止一組的傳聲 筒, 試著用不同大小或		
4. Scissors	不同材質的杯子,例如紙杯、塑膠杯或罐頭。若使用罐頭,請留		
5. Tape	<b>意</b> 銳利的罐口緣。)		
	2. 一段長度約四到五公尺的線		
	3. 迴紋針		
· ·	4. 剪刀		
	5. 膠帶		
Clean out the cups and poke a sm	nall hole in the		
將每個杯子清潔乾	无淨後在底部戳一個。		

cardboard, plastic or tin. If you use tin,



to go back	talking into the	讓線不致溜出杯洞(迴紋針應在 杯內)。在
through the hole (the paperclip should be inside the	other one. Make sure the string is taut. Don't forget to	t杯洞口封上膠帶。
cup). Attach some tape around the hole to close it up.	record your findings in your Science Journal	.另一個杯子也如法炮製。
Do the same with the other cup.		你拿一個杯子,你的朋友拿另一個杯子,兩人站遠一點,一個人將杯子靠近她 或他的耳朵,
Take one of the cups and have a friend take the		另一個對著杯子說話,線 必須要拉緊才行喔。 別忘了把自己的發 現寫在《科學日誌》中!
other. Stand apart, with one person holding one of the	小洞, 這個洞只要大到可以把線穿進去 即可。	
cups up to his or her ear and the other	將線的一端穿過一個杯子, 然後綁上迴 紋針,	

### WHAT'S THE SCIENCE? 科學原理



Vibrating objects create sound waves. When you speak into one of the cups, your vocal chords vibrate to create sound waves. Sound waves are compression waves, which means they move by the compression of a fluid. First they move through the air in the cup, then they move along the length of the string. Next they move through the air in the cup on the other end and into your friend's ear. Once the waves reach your friend's ear, they cause your friend's eardrum to vibrate. These vibrations are eventually changed into nerve signals that your friend's brain can detect.

Note that if the string isn't taut, the vibrations die out before they are able to travel the length of the string. And if you hold onto the string, the vibrations won't be able to pass.

震動的物體會產生聲波,當你對著杯子說話時,你的聲帶震動產生了聲波,聲波是一種壓力波,這表示它們隨著流體的壓力而傳播。首先,聲波會穿透杯中的空氣,然後它們透過那段線傳遞,接著他們又傳到另一端杯子中的空氣,最後才傳到你朋友耳裡。聲波一傳到你朋友耳裡,會使你朋友的耳膜震動,震動最後會轉換為大腦偵測的到的神經信號。

注意,當線不是緊繃時,震動會在傳送到末端途中就消失;若你握著這段線,震動也無法通過。