

《整全教育中文》第二版第五册第七课《蜜蜂》

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蜜蜂 群体





蜂王



工蜂

蜂房



雄蜂



摄图·新视界

工蜂

雄蜂

蜂王

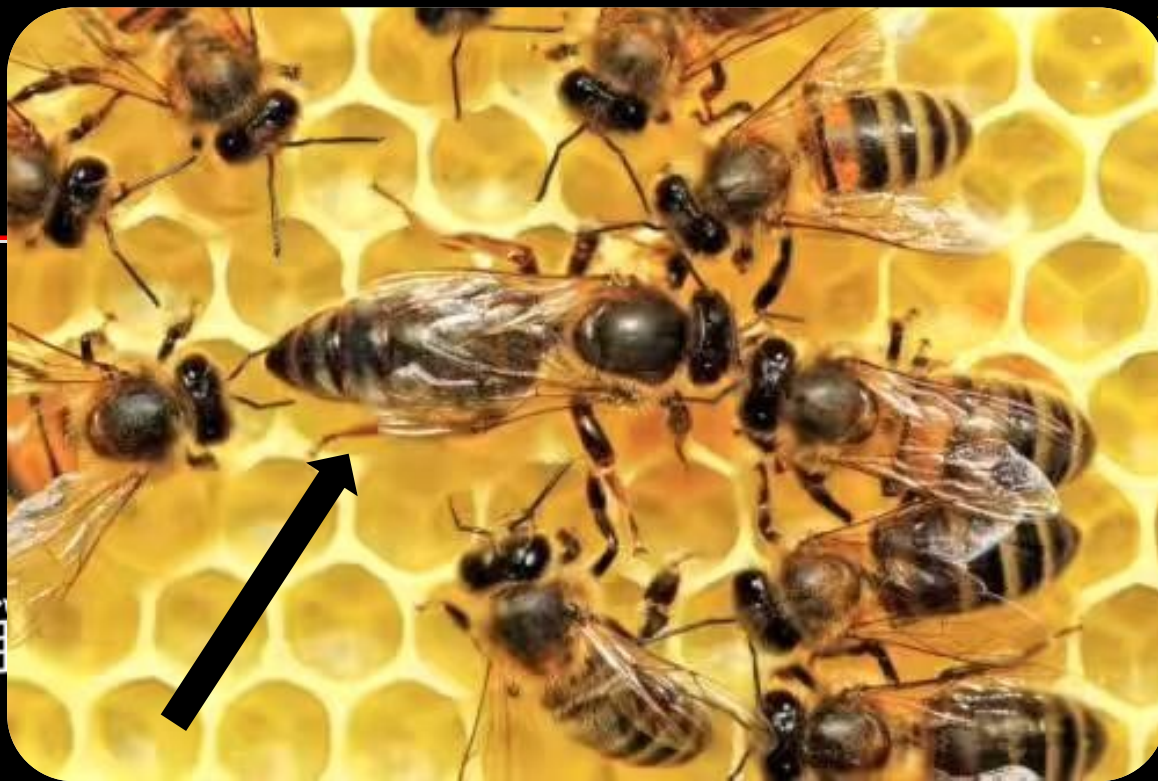


蜜蜂音效—蜜蜂高清画面

<https://www.youtube.com/watch?v=flrOnwwHtK8>

谁是蜂王

找一找



谁是雄

是工蜂

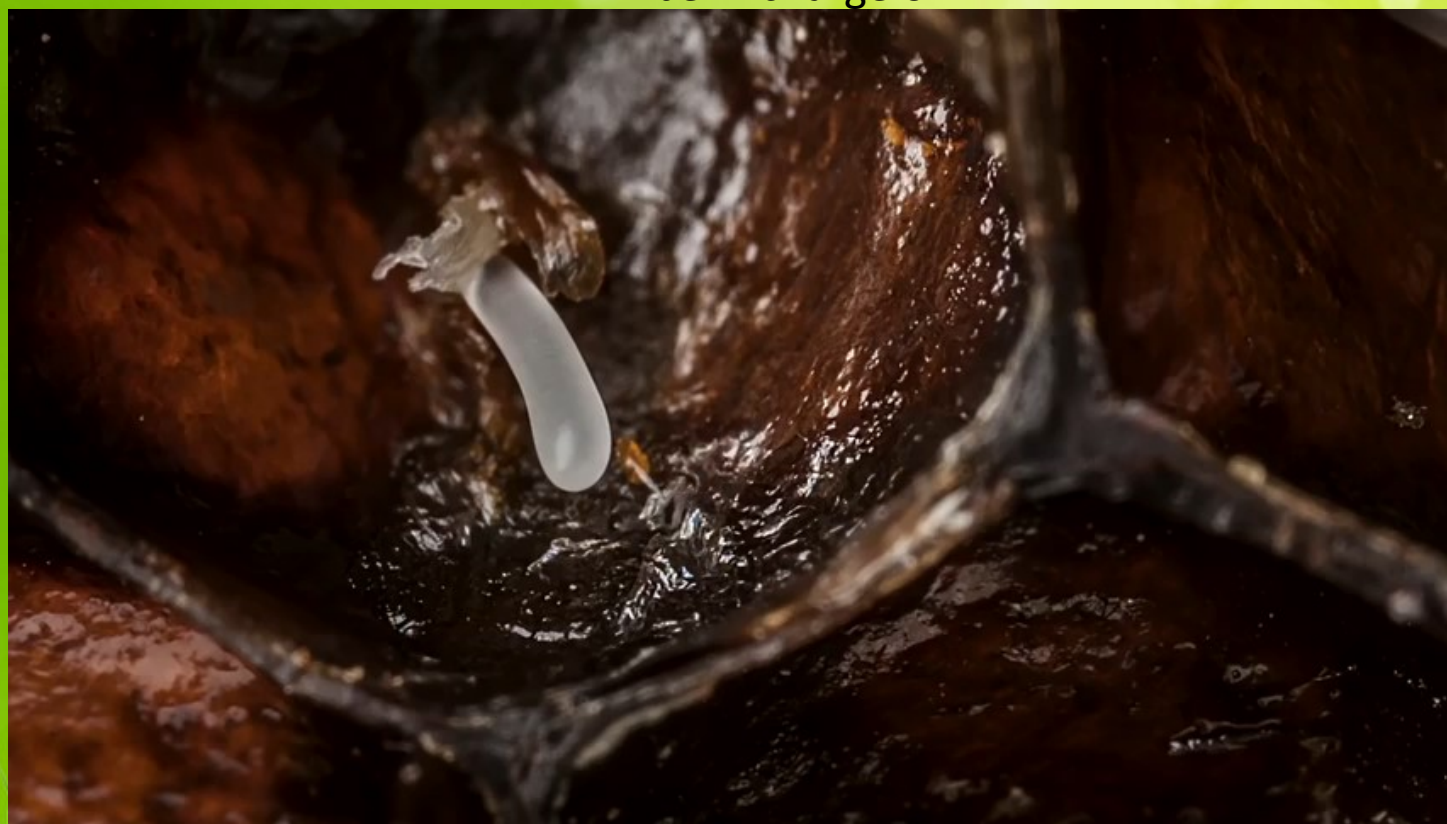


我们最后再来看下工蜂



蜂王和雄蜂负责生小蜜蜂

Fù zé
be in charge of



采蜜

Fù zé
工蜂负责
be in charge of

酿蜜





花粉



花蜜



大概是一滴水的重量

它一次能吸入40毫克的花蜜



蜜蜂在采蜜时，后足会收集花粉，形成花粉团。



从前足传到中足再传到后足

超浓缩天然药库

花粉中含有22种氨基酸，
14种维生素和30多种微量元素
是人类天然食品中的瑰宝。





你知道吗？

1. 工蜂每天都在忙什么？
2. 工蜂每天飞出去几次？每次能采几朵花？
3. 工蜂出去采蜜，飞一个**来回**是多少公里？
4. 工蜂的**寿命**（life span）是多长？
5. 一只工蜂一生能酿出多少**克**（gram）蜂蜜。



A detailed illustration of a honeybee with its wings spread, perched on a bright yellow sunflower. The background is a warm, golden-yellow gradient with stylized sun rays. The entire scene is framed by a decorative border featuring honeycomb patterns and small bee icons.

从春季到秋季，在有花的季节里，
蜜蜂每天都很忙。

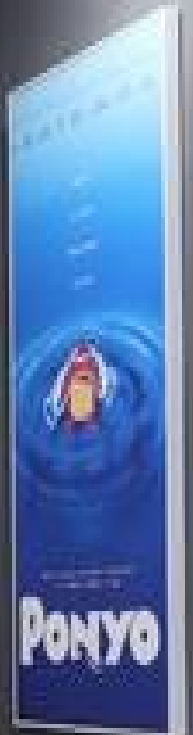
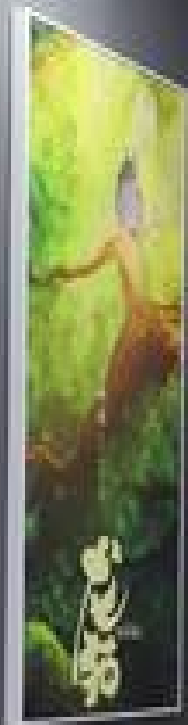
采集花粉和花蜜

酿蜜

养小蜜蜂

清理蜂房

你们知道为什么说蜜蜂很勤劳吗？



问题环节

[问题环节]
好了!小朋友们,

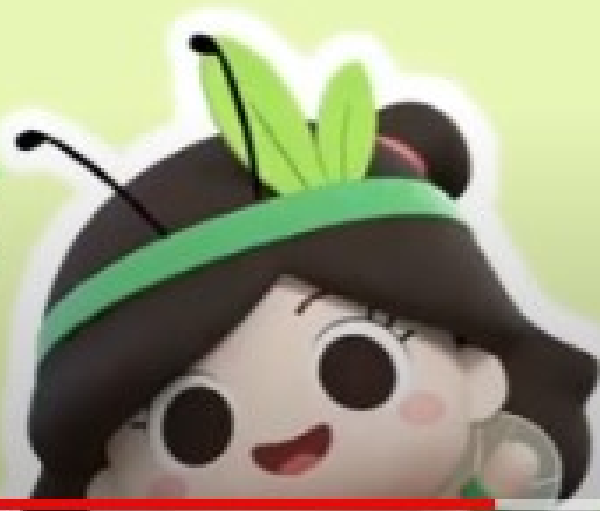
你们还记得蜜蜂为什么要跳舞吗?

A. 好玩

 B. 交流

 C. 交朋友

我知道了,





翁翁声是不是蜜蜂在说话？





像小蜜蜂一样勤劳

我们平时形容一个人勤劳，我们会怎么说？



蜜蜂还有个认路的好办法。

蜜蜂还能靠太阳认路!





小蜜蜂跑出去那么远 不会迷路吗？



蜂巢—蜜源的距离不超过50-70m

蜂巢—蜜源的距离超过50-70m

蜜蜂的舞蹈



waggle dance



<https://www.youtube.com/watch?v=DNQyrpc7CwQ>

【超个体之蜜蜂03】工蜂是什么智能小家电?蜜蜂的智能无法想象

及它离蜂巢很近的信息

重复多次这样的8字形舞蹈

蜂王浆



蜂蜜



蜜蜂

清理

组成

体重

辛苦

昆虫

采集







END

