



CRYSTAL DINOSAUR GROWING KIT-ANKYLOSAURUS INSTRUCTION

STEAM
EDUCATIONAL PRODUCT



3

Level

**PHYSICAL
SCIENCES**

8+
Year



WARNING CHOKING HAZARD-SMALL PARTS. NOT FOR CHILDREN UNDER 3 YEARS. THIS SET CONTAINS CHEMICALS THAT MAY BE HARMFUL IF MISUSED. READ CAUTIONS ON INDIVIDUAL CONTAINERS CAREFULLY. NOT TO BE USED BY CHILDREN EXCEPT UNDER ADULT SUPERVISION.

产品配件



量杯 x1



恐龙蛋 x1



底座 x1



甲龙 x1



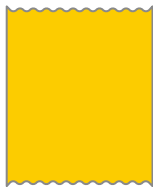
橙色晶种 x1



红色晶种 x1



搅拌棒 x1



黄色晶粉 x1



橙色晶粉 x1



红色晶粉 x1



警告：

本产品含有滥用时可能对人体有害的化学物质。请仔细阅读个别容器上的注意事项。阅读说明书中的信息，遵循它们并将它们作为参考。不要让化学品接触身体的任何部位，特别是嘴巴和眼睛。如不慎溅到眼睛，应用水彻底冲洗并立即就医。让小孩子和动物远离实验。

儿童需在成人监督下使用。不建议 8 岁以下儿童使用。将实验装置放置在 8 岁以下儿童接触不到的地方。

监护人建议：

阅读并遵循《安全规则》和《急救》的信息，并保存它们作为参考。不正确地使用化学药品会对健康造成伤害和损害。

本实验装置只建议进行说明书中列出的实验。

本实验装置仅供 8 岁以上儿童使用。

由于儿童的能力差异，即使是在年龄组内，监管成年人也应谨慎决定哪些实验适合他们，哪些实验对他们来说是安全的。

本说明使监护人能够评估实验风险，以确定其是否适合特定的儿童。

监护人应在实验开始前与儿童或儿童讨论警告和安全信息。

实验周围区域应远离任何障碍物，远离食物存放处。应保持良好的照明和通风，并靠近水源。

禁止化学品或晶体生长液接触除耐热晶体生长容器内部以外的任何物体。

化学物质和溶液可能会对衣服、物体或表面造成损害。

包装中的物质应在一次实验过程中（打开包装后）全部用完，不建议重复使用。

安全规则：

- 使用前请阅读本说明书，并遵照执行，以供参考。
- 幼儿及动物远离实验区域。
- 将本实验装置及水晶存放在 8 岁以下儿童拿不到的地方。
- 使用后清洁所有设备，确保所有的空容器或不可重复使用的包装已妥善处理。
- 实验后洗手。
- 不要在实验区域内吃喝。
- 不要让化学品接触眼睛或嘴巴。
- 请勿将任何物质或溶液涂抹于身体。
- 不要在存放食物或饮料的地方或卧室里种植水晶。
- 不要使用任何没有在使用说明中推荐的设备。
- 使用热水和热溶液时要小心。
- 确保在晶体生长期间，盛有液体的容器不能被 8 岁以下的儿童接触到。
- 按照当地规定处理物品和容器。

急救：

- 眼睛接触：用大量清水冲洗眼睛，必要时保持眼睛张开，立即就医。
- 如不慎吞食：请用清水漱口，不要催吐，立即就医。
- 如吸入：将人移至新鲜空气处。
- 皮肤接触及灼伤：用大量清水冲洗患处至少 10 分钟。
- 如有疑问，应及时就医。随身携带化学药品及其容器。万一受伤，一定要就医。

量杯实验(探究实验)

实验材料:

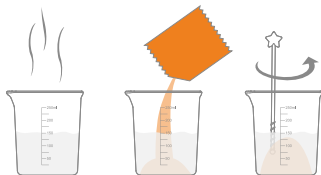
晶种(橙色 x1, 红色 x1)

晶粉(橙色 x1, 红色 x1)

实验器具: 量杯、搅拌棒、底座

实验步骤:

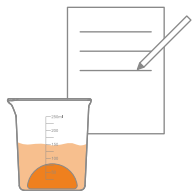
1、用量杯量取 140ml 100 摄氏度的开水, 将一包晶粉袋中的晶粉全部倒入量杯中, 用搅拌棒充分搅拌直至晶粉完全溶解(建议搅拌 2 分钟以上)。



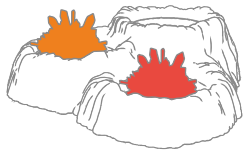
2、将量杯中的溶液冷却至 30 摄氏度(建议冷却约 50 ~ 70 分钟)。

3、随后将对应颜色的半球形晶种放入量杯底部(凸面朝上), 静置 3~7 天(注意: 不要晃动量杯, 避免阳光直射)。

根据天气湿度等情况决定静置天数, (晴天大约 3 天左右, 雨天大约 3 天以上), 每天观察量杯中水晶的生长情况, 并且根据生长状态在表格中记录。



4、等到水晶生长到一定大小之后, 将量杯中的溶液缓慢倒出, 并且将水晶在量杯中停留一天等待风干。一天后, 将水晶小心地取出, 放置在底座上。



注: 1、晶粉溶液可能会对搅拌棒、桌子等表面造成染色, 若不慎接触, 请及时进行擦拭和清洗。

2、若在实验过程中, 溶液表面产生浮晶, 要及时清理掉, 否则会影影响水晶生长。

探究实验水晶生长过程

生长记录表格：

观察你的水晶生长过程，记录下它的生长状态吧。

（在生长状态的图示下面打“√”）

		温度	时间	水晶生长状态图示				
橙色晶种	第一天							
	第二天							
	第三天							
	第四天							
	第五天							
	第六天							
	第七天							

		温度	时间	水晶生长状态图示				
红色晶种	第一天							
	第二天							
	第三天							
	第四天							
	第五天							
	第六天							
	第七天							

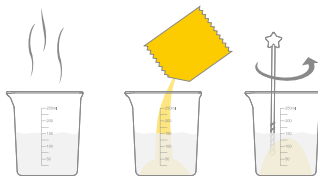
恐龙蛋实验(进阶实验)

实验材料：晶粉（黄色x1）

实验器具：恐龙蛋（内含棘龙）、量杯、搅拌棒、底座

实验步骤：

1、用量杯量取 140ml 100 摄氏度的开水，将一包晶粉袋中的晶粉全部倒入量杯中，用搅拌棒充分搅拌直至晶粉完全溶解（建议搅拌 2 分钟以上）。



2、将量杯中的溶液冷却至 30 摄氏度（建议冷却约 50 ~ 70 分钟）。

3、将恐龙蛋的盖子打开，确保看到恐龙直立站在蛋中，将量杯中的溶液全部倒入恐龙蛋中。



4、将蛋中的溶液与恐龙静置 3~7 天（注意：不要晃动恐龙蛋，避免阳光直射，保持蛋的盖子是打开的）



根据天气湿度等情况决定静置天数，（晴天大约 3 天左右，雨天大约 3 天以上），每天观察蛋中恐龙水晶的生长情况。

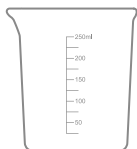
5、等到水晶恐龙生长到一定大小之后，将蛋中的溶液缓慢倒出，并且将水晶恐龙在蛋中停留一天等待风干。一天后，将恐龙水晶小心地取出，放置在底座上。（注意：取出时手拿恐龙身体，不要接触到水晶）



注：1. 晶粉溶液可能会对搅拌棒、桌子等表面造成染色，若不慎接触，请及时进行擦拭和清洗。

2、若在实验过程中，溶液表面产生浮晶，要及时清理掉，否则会影响水晶生长。

Parts List



Measuring cup x1



Dinosaur egg x1



Pedestal x1



Ankylosaurus X1



Seed crystal x1



Seed crystal x1



Stir bar x1



Crystal powder x1



Crystal powder x1



Crystal powder x1



WARNING: This set contains chemicals that may be harmful if misused . Read the information in the instruction manual. Do not allow chemicals to come into contact with any part of body, particularly the mouth and eyes. Get medical attention immediately if splashed eyes. Keep small children and animals away from experiments. Not to be used by children except under adult supervision. Not recommended for children under 8 years of age. Keep the experimental set out of reach of children under 8 years old.

ADVICE FOR SUPERVISING ADULTS:

Read and follow these instructions. the safety the first aid information, and keep them for reference.

The incorrect use of chemicals can cause injury and damage to health. Only carry out those experiments which are Listed in the instructions.

This experimental set is for use only by children over 8 years.

Because children's abilities vary so much, even within age groups, supervising adults should exercise discretion as to which experiments are suitable and safe for them. The instructions should enable supervisors to assess any experiment to establish its suitability for a particular child.

The supervising adult should discuss the warnings and safety information with the child or children before commencing the experiments.

The area surrounding the experiment should be kept clear of any obstructions and away from the storage of food. It should be well lit and ventilated and close to a water supply.

Do not allow chemicals or the crystal growing solution to touch any object besides the inside of your heat resistant crystal growing container. Chemicals and the solution may cause damage to clothes, objects, or surfaces.

Substances in non-reclosable packaging should be used up (completely) during the course of one experiment, i.e. after opening the package.

SAFETY RULES:

- Read these instructions before use, follow them and keep them for reference.
- Keep young children and animals away from the experimental area.
- Store this experimental set and the final crystal(s) out of reach of children under 8 years of age.
- Clean all equipment after use. Ensure that all empty containers and/or non-re closable packaging are disposed properly.
- Wash hands after carrying out experiments.
- Do not eat or drink in the experimental area.
- Do not allow chemicals to come into contact with the eyes or mouth.
- Do not apply any substances or solutions to the body.
- Do not grow crystals where food or drink is handled or in bedrooms.
- Do not use any equipment which has not been supplied with the set or recommended in the instructions for use.
- Take care while handling with hot water and hot solutions.
- Ensure that during growing of the crystal the container with the liquid is out of reach of children under 8 years of age.
- Dispose of contents and container in accordance with local regulations.

FIRST AID:

- In case of eye contact: Wash out eye with plenty of water, holding eye open if necessary. Seek immediate medical advice.
- If swallowed: Wash out mouth with water, drink some fresh water. Do not induce vomiting. Seek immediate medical advice.
- In case of inhalation: Remove person to fresh air.
- In case of skin contact and burns: Wash affected area with plenty of water for at least 10 minutes.
- In case of doubt, seek medical advice without delay. Take the chemical and its container with you.
- In case injury always seek medical advice.

Experiment in measuring cup

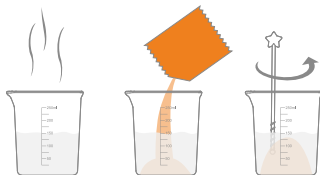
Experiment Materials: Seed crystal (orange*1, red*1)

Crystal powder (orange*1, red*1)

Experiment Fittings: measuring cup, stir bar, pedestal

Experiment Procedures:

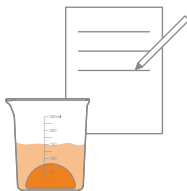
1. Take 140ml boiling water at 100C° with a measuring cup, pour all the crystal powder into the measuring cup, and stir with a stir bar until the crystal powder is completely dissolved (It is recommended to Stir for more than 2 minutes).



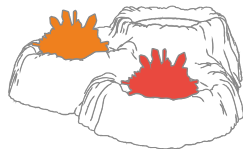
2. Cool the solution in the measuring cup to 30C° (It is recommended to cool for about 50 to 70 minutes).

3. The hemispherical seed of corresponding color was then placed at the bottom of the measuring cup and allowed to stand for 3~7 days(Convex upward) (**Attention: Do not shake the measuring cup. Avoid direct sunlight**)

According to the weather humidity and other conditions, determine the number of days for standing (about 3 days in sunny day and more than 3 days in rainy days), observe the growth of crystal in the measuring cup every day, and record it in the form according to the growth status.



4. After the crystal have grown to a certain size, slowly pour the solution out of the measuring cup **and leave the crystal in the cup for a day to dry**. After a day, carefully remove the crystal and place it on the pedestal.



Note: The crystal powder solution may stain the surface such as the stir bar and the table. In case of accidental contact, please wipe and clean right now.




2. If floating crystals appear on the surface of geological toys during the experiment, they should be cleaned up in time, otherwise the crystal growth will be affected.




Explore crystal growth process

GROWTH RECORD FORM:

Observe your crystal growth process and record its growth state.

(tick "✓" under the figure of growth state)

The orange Seed crystal	TEMP	TIME	GROWTH STATE				
DAY1							
DAY2							
DAY3							
DAY4							
DAY5							
DAY6							
DAY7							

The red Seed crystal	TEMP	TIME	GROWTH STATE				
DAY1							
DAY2							
DAY3							
DAY4							
DAY5							
DAY6							
DAY7							

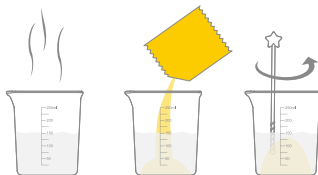
Experiment in dinosaur egg

Experiment Materials: Crystal powder (yellow*1)

Experiment Fittings: Measuring cup, Dinosaur egg, Spinosaurus, stir bar, pedestal

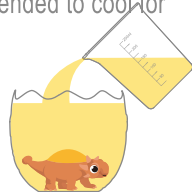
Experiment Procedures:

1. Take 140ml boiling water at 100C° with a measuring cup, pour all the crystal powder into the measuring cup, and stir with a stir bar until the crystal powder is completely dissolved (It is recommended to stir for more than 2 minutes).



2. Cool the solution in the measuring cup to 30C° (It is recommended to cool for about 50 to 70 minutes).

3. Open the lid of the dinosaur egg, Make sure you see the dinosaur standing up right in the egg, and pour the solution from the measuring cup into the egg.



4. Leave the solution in the egg and the dinosaur for 3-7 days (**Note: do not shake the egg, avoid direct sunlight, and keep the lid on the egg open**)

According to the weather humidity and other conditions, determine the number of days to rest (about 3 days in sunny day and more than 3 days in rainy day), and observe the growth of dinosaur crystal in eggs every day.



5. After the crystal dinosaur has grown to a certain size, slowly pour out the solution in the egg **and leave the crystal dinosaur in the egg for a day to dry**. A day later, carefully remove the dinosaur crystal and place it on the base. (**Attention: Do not touch the crystal when removing the dinosaur.**)



Note: 1. The crystal powder solution may stain the surface such as the stirring rod and the table. In case of accidental contact, please wipe and clean right now.

2. If floating crystals appear on the surface of geological toys during the experiment, they should be cleaned up in time, otherwise the crystal growth will be affected.

SCIENCE CAN (HIBL) LEARNING

Improve children's scientific thinking
& problem-solving ability



**LIFE
SCIENCES**



**PHYSICAL
SCIENCES**





**GEO-
SCIENCES**



**SPACE &
TECHNOLOGY**



微信  扫码看玩法视频
畅玩攻略,探索不一样的世界

Wechat  scan code to see the play video
How to play to explore a different world

ITEM No. 120483

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