

FOUNDED 1851

聖保羅書院 中一家長迎新日

St. Paul's College
F.1 Parents' Orientation Day

Learning and Teaching 學校教與學簡介

Information for Parents

Vice Principal: Mr. Yuen King Hang, Alan
袁經恒副校長

TRUTH

寅畏上主是為智之本

Learning Life in St. Paul's College

1. Before 3:30pm - Learning Life
2. After 3:30pm - Extracurricular activities
3. Assessments

1. Before 3:30pm - Learning Life

Subjects

| | |
|-----------------------|--------------|
| English | (10 periods) |
| 中國語文及普通話 | (8 periods) |
| Mathematics | (6 periods) |
| Integrated Humanities | (5 periods) |
| Integrated Science | (4 periods) |
| 中國歷史 | (2 periods) |
| Religious Studies | (2 periods) |
| Computer Literacy | (2 periods) |
| Music | (2 periods) |
| Visual Arts | (2 periods) |
| Physical Education | (2 periods) |

4.1 Metabolism

all the chemical reactions within a living cell

The cell is the basic unit of life. It carries out different chemical reactions to keep an organism alive. The **sum of the chemical reactions** that take place in an organism is called **metabolism**. It includes the following two types of metabolic reactions.

1 Catabolism

metabolic waste
 $H_2O_2 \xrightarrow{\text{slow}} H_2O + O_2$

Catabolism refers to the **breaking-down reactions** in an organism. In catabolic reactions, complex molecules are broken down into simpler molecules with the **release of energy** (Fig 4.1).

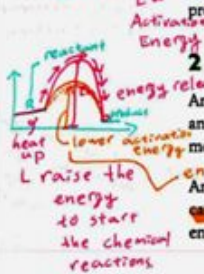
An example of catabolism is the breakdown of **glucose molecules** into **carbon dioxide and water** during **respiration**. **Energy is released** in the process.

2 Anabolism

Anabolism refers to the **building-up reactions** in an organism. In anabolic reactions, complex molecules are synthesized from simpler molecules. **Energy is required** to drive the reactions (Fig 4.2).

An example of anabolism is the synthesis of **glucose** molecules from **carbon dioxide and water** during **photosynthesis**. **Sunlight** provides energy for the process.

*heat up
↓
chemical reactions*



Ea Activation Energy
release in form of heat



food breakdown into oxygen CO2 + heat

4.2 The role of enzymes in metabolism



Fig 4.3 Analogy for the activation energy in a chemical reaction

enzymes speed up processes

Enzyme provides another way for chemical reaction

For every reaction, a certain amount of energy must be supplied to the reactants before the reaction can occur. This energy is called the **activation energy**. It is like the case shown in Fig 4.3. Energy is needed to push the rock up to the hilltop before it can roll down.

In our body, **enzymes** are present which function as **biological catalysts**. They help **lower the activation energy** so that chemical reactions can take place at body temperature at a faster rate (Fig 4.4).

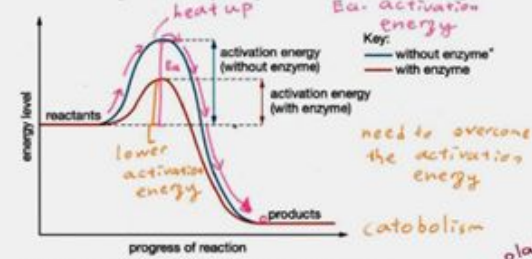


Fig 4.4 Enzymes work by lowering the activation energy

enzymes: act as a platform won't be consumed during the reaction

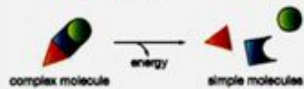


Fig 4.1 Catabolic reaction



Fig 4.2 Anabolic reaction

Key learning

catabolism breaks down reactions
Anabolism build-up reaction requires energy

What are catabolism, anabolism and metabolism?

| | | |
|--|---|--|
| Catabolism The breaking-down reactions in an organism. | Anabolism The building-up reactions in an organism. | Metabolism The sum of the chemical reactions that take place in an organism. |
|--|---|--|

Background chemistry

Energy changes in metabolic reactions

Fig 4.5 shows the **energy profiles** for a catabolic and an anabolic reaction.

- In a catabolic reaction, the energy level of the products is lower than that of the reactants. Energy is released during the reaction. Catabolic reactions are said to be **exergonic**.
- In an anabolic reaction, the energy level of the products is higher than that of the reactants. Energy is absorbed during the reaction. Anabolic reactions are said to be **endergonic**.

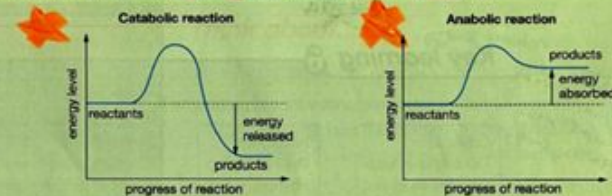


Fig 4.5 Energy profiles for catabolic reactions (left) and anabolic reactions (right)

Target: Develop learning skills

Relative clauses (Non-defining)

Non-defining relative clauses: 起修饰作用描述的是已经存在的或者已经发生的事

position: after the subject or object of the sentence.
usage: gives extra information about the subject or object. (do NOT define/identify the subject or object)
情景1: The relative pronoun is the subject (subject pronoun)
情景2: The relative pronoun is the object (object pronoun)

*注意: relative pronoun can NOT be omitted

情景3: The relative clause -> in the middle of the sentence
情景4: The relative clause -> in the end of the sentence

情景5: The special use of which: gives more info about a clause

- Relative pronoun:
1. who refer to people
2. which refer to objects / clause
3. whose = possession / rights etc.
4. where refer to place
5. when refer to time
6. why refer to reason
I don't DO NOT USE PLS!!!
used after a noun.
Punctuation rule:
use commas when writing
: after the subject
: after the object

- Main points:
1.) relative pronoun: that + punctuation
2.) relative pronoun = subject / object
3.) gives extra information about the subject / object -> position: middle / end of the sentence

内容:
重要字词翻译: 目的语群
完璧归赵: 写作手法: 语言描写, 行动描写, 间接描写
渑池之会: 借喻手法对比, 类比(廉颇)

1. 重要字词翻译
- 廉君之寡妻 -> 妾媵
- 欲以什物 -> 礼物
- 以城下之盟 -> 盟约
- 相如: 相像/相等
- 完璧: 完整
- 以诈: 用欺骗
- 相如: 相像
- 相如: 相像
- 相如: 相像

5. 对比
- 渑池之会: 渑池, 渑水, 渑池, 渑池
- 渑池之会: 渑池, 渑水, 渑池, 渑池
- 渑池之会: 渑池, 渑水, 渑池, 渑池

2. 语言描写
- 渑池之会: 渑池, 渑水, 渑池, 渑池

3. 行动描写
- 渑池之会: 渑池, 渑水, 渑池, 渑池

作用: 通过人物的语言来表现其性格, 使人物的形象更生动

7. 完璧归赵
- 渑池之会: 渑池, 渑水, 渑池, 渑池

FEB 2018

Week 5

26 MON

- ① Dict # 29-39 (1/3) (IH His)
- ② Bring green bk tmr (IH His)
- ③ Online Grammar Lab Deadline
 - Ⓐ 14-16, 23-25 9/3
 - Ⓑ 64-65 29/4
 - Ⓒ 1-4, 82 1/6
- ④ 友偵探小說閱讀報告(1/3)
- ⑤ Dict StC (Eng)

27 TUE Spring Staff Meeting (tbc)

- ① Dict 女去 10/F Mr. See's Box (Eng) ★★ (Tmr)
- ② Module 5 Compre 2 (1/3) (Eng)
- ③ Dict StC (1/3) (IH His)

28 WED

- ① Booklet P.36 (Eng LA) (1/3)
- ② 交 \$20 for 王江會費 (王江勝) (1/3)
- ③ 預習《風雪中的不平》(1/3)
- ④ 春聯 (1/3) (中文)

MAR 2018

26/2-4/3

1/3 THU

- ① 讀默《風雪中的不平》(1/3) (中文)
- ② My Grammar Lab p.14-16 (1/3) (Eng)

Geog. (CW)

F.6 Reports to Students 2 FRI

E.6 Last Day

Last Assembly

- ① Dict - Map reading skills P.45-46 (latitudes & longitude) (1/3)
- ② WT - Unit 4 Area. Unit 5 P.44-46, Using urban space wisely Unit 1.2
- ③ Quiz 3 (p.34-40) (1/3) (IS)
- ④ WB P. 10-18 (1/3) (IS)
- ⑤ Dict P.22-23, 26-27 (1/3) (Eng)
- ⑥ Bring 2 ruler, 1 glue (IS)

3 SAT

E.I Admissions

Interview

Bring Solar Oven materials (IS)

- ① Shoe box (with cover) x1
- ② 剪刀 x5
- ③ Ruler x5
- ④ Glue x1
- ⑤ Tape

4 SUN

- ⑥ Yakult (益力多) bottle x2
- ⑦ Mirror x1

Target: Manage their schedule by themselves

MAR 2019

18 MON

~~Eng Oral Booklet P18~~
~~LA Booklet P3~~
~~Science Test Comsign~~
~~Math WS 3~~

Week 30

TH: Dictation
26-40

知愛校
平最限期

中史作業 P19-52
中測修改
IH WS
~~Oral Booklet P4~~

19 TUE

~~中史作業 P19-52~~

~~中測修改~~

Math Test Corr
Math WS Corr

20 WED

~~Math Test Corr~~
~~Math WS Corr~~

Math ws P1-4

MAR 2019

18/3-24/3

~~Oral Booklet P4~~
Math ws P1-4

21 THU

~~中文默書
1-3 條抽 10 詞
4 條 讀 寫~~

LA Booklet P6-8
Math WS

~~Science Booklet P14~~
中文單元筆記結構圖

Math Bring Ch10

Hand in ~~Science Booklet P19~~
~~Oral Booklet P4~~
~~Math WS~~
Science

22 FRI

~~Eng Dict~~
~~From~~
~~UT~~
~~Words~~

Math B
qs# 29, 35, 36*
~~Math WS~~

~~Science Booklet P19~~
~~LA Booklet P6-8~~
~~Math WS~~
~~中文單元筆記結構圖~~

23 SAT E4 & 5 Career Day

~~LA Booklet P6-8~~
~~Math WS~~

中文單元筆記結構圖

24 SUN

溫中史測題
溫IH Test
溫中文默書
溫數學測題

2. After 3:30pm

- Extracurricular Activities

- Sports Teams
- Music Groups
- Student Association clubs & societies
- Uniform Groups
- Foreign Language Classes
- STEM team

| Team | Mon | Tue | Wed | Thu | Fri | Sat |
|---------------|-----|-----|-----|-----|-----|-----|
| Archery | | ✓ | | | | ✓ |
| Athletics | ✓ | | ✓ | | | |
| Badminton | | ✓ | | ✓ | | |
| Basketball | | ✓ | ✓ | | | ✓ |
| Bowling | | | | | ✓ | |
| Cross-country | | | | | ✓ | |
| Fencing | ✓ | | | ✓ | | |
| Football | ✓ | | | ✓ | | |
| Handball | ✓ | | | | ✓ | |
| Hockey | | | ✓ | | | ✓ |
| Swimming | ✓ | | | | ✓ | |
| Table-tennis | | | ✓ | | ✓ | |

Sports Teams Training Schedule

| Team | Date | Place | Time |
|-------------------|---|--|--------------|
| Badminton Team | 5 th September Thursday | Shek Tong Tsui Sports Centre (6 th Floor) 石塘咀室內體育館 | 3:00 to 4:00 |
| Basketball Team | 10 th September Tuesday | School Gymnasium | 3:45 to 6:00 |
| Football Team | 4 th September Wednesday | Happy Valley Sports Ground Pitch No.1 跑馬地足球場一號場 | 3:00 to 4:30 |
| | 6 th September Friday | Aberdeen Sports Ground 香港仔運動場 (港鐵海洋公園站) | 3:00 to 4:30 |
| Fencing | 9 th September Monday | School Gymnasium | 3:45 to 5:15 |
| Swimming | 9 th September Monday | Sun Yat Sen Memorial Park Swimming Pool 孫中山公園泳池 | 4:00 to 5:00 |
| Table-tennis Team | 11 th September Wednesday | School Gymnasium | 3:45 to 5:00 |

Sports Teams Selection

| Music Team | Rehearsal Schedule | |
|--------------------|---------------------------|------------------|
| Junior Choir | Thursday | 3:45pm to 5:15pm |
| Intermediate Choir | Wednesday | 3:45pm to 5:15pm |
| Symphony Orchestra | Friday | 3:45pm to 6:00pm |
| Concert Band | Tuesday | 3:45pm to 6:00pm |

Music Teams Training Schedule

Student Association clubs & societies

- over 40 clubs and societies
- subject related or interest groups

Uniform Groups

- Youth Red Cross (Thursday lunch time)
- Scout (Saturday afternoon)

Foreign Language Classes

- Japanese, Spanish (Saturday morning)
- 100 hours per year

STEM team

- Weekday after school

3. Assessments

- Two school terms
 - September to December
 - January to May
- Classwork mark (平時分)
 - including homework, quizzes, projects, tests, etc.
- Two Examinations (兩次考試)
 - January & June