

2022 年「學而思盃」P5 比賽大綱

本次比賽分為甲、乙、丙三部分。

甲部有 15 題，每題 2 分

乙部有 15 題，每題 4 分

丙部有 10 題，每題 6 分

比賽時間 60mins，共 40 題，滿分 150 分。

板塊	知識點
計算板塊	<ol style="list-style-type: none"> 1. 基本運算 2. 簡便運算 3. 公式類計算
計數板塊	<ol style="list-style-type: none"> 1. 容斥原理 2. 染色問題
應用題板塊	<ol style="list-style-type: none"> 1. 和差倍問題 2. 盈虧問題 3. 雞兔同籠 4. 平均數問題 5. 分數應用題 6. 工程問題
圖形板塊	<ol style="list-style-type: none"> 1. 等高模型 2. 等積變形 3. 圖形分割 4. 立體幾何
數論板塊	<ol style="list-style-type: none"> 1. 帶餘除法 2. 整除特徵 3. 質因數分解
組合板塊	<ol style="list-style-type: none"> 1. 邏輯推理 2. 抽屜原理與最不利原則 3. 數獨
行程板塊	<ol style="list-style-type: none"> 1. 相遇追及 2. 環形跑道 3. 火車過橋 4. 流水行船

*英文版僅作參考，以中文版為準。

2022 「Think Mathematics Competition」 P5's Outline

The competition is divided into three parts: A, B and C.

Section A: 1st to 15th Question (Each carries 2 marks)

Section B: 16th to 30th Question (Each carries 4 marks)

Section C: 31th to 40th Question (Each carries 6 marks)

The time is 60mins, with a total of 40 questions and a full score of 150 marks.

Modules	Knowledge
Calculation Modules	<ol style="list-style-type: none"> Mixed Four Operations of Fractions Fast Calculation Operations through Formulas
Counting Modules	<ol style="list-style-type: none"> Inclusion-Exclusion Principle Coloring Problems
Word Problem Modules	<ol style="list-style-type: none"> Questions Involving Sum, Difference and Multiples Distribution Problems Chicken-Rabbit Problems Questions Involving Average Application of Fractions Work Word Problems
Geometry Modules	<ol style="list-style-type: none"> Models of Different Shapes with Equal Height Different Shapes with the Same Base and Height Cutting and Splicing 3-D Shapes
Number Theory Modules	<ol style="list-style-type: none"> Division with Remainders Characteristics of Division Without Remainders Prime Factorization
Combinatorics	<ol style="list-style-type: none"> Logical Reasoning Worst Case in Pigeonhole Principle Problems Sudoku
Distance Word Problems	<ol style="list-style-type: none"> Chasing and Meeting Problems Circular Runway Train Passing the Bridge Travel Word Problems of Boats

**English version is for reference only, the Chinese version shall prevail.*