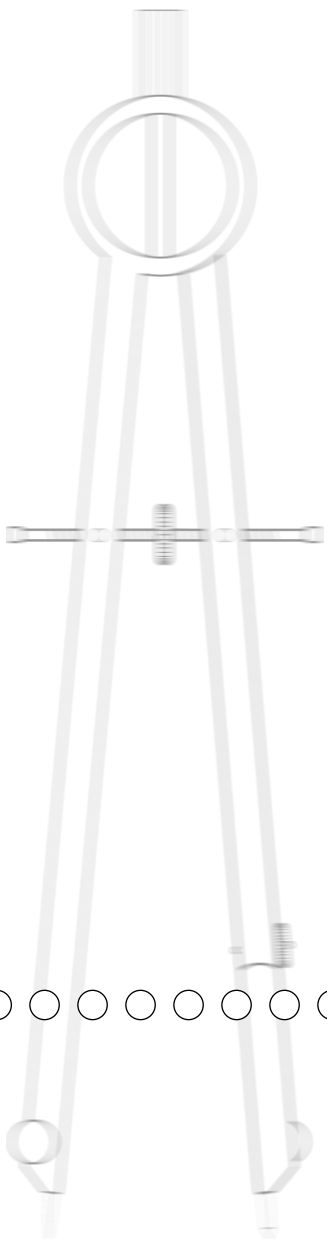


## Appendix D: Country Adaptations To Items and Item Scoring





## Country Adaptations To Items and Item Scoring

### D.1 Items To Be Deleted In Countries

#### All Countries

M02 Mathematics (figure incorrectly drawn; no answer)

#### Bulgaria

H07 Mathematics (Bar chart histogram of travel time – y-axis mislabeled)

#### Canada, French

H07 Mathematics (Bar chart histogram of travel time – y-axis mislabeled)

I02 Mathematics (4/5 of books more than 2/3 – option C missing; it is the key)

T04 Mathematics (Height of stack from paper thickness – stem not correct)

#### Cyprus

F03 Science (Humans interpret senses – Wrong in 95, kept the same)

H01 Science (Not a function of the blood – Wrong in 95, kept the same)

#### Czech Republic

R01 Science (Bacteria/mold experiment – mistranslated stem)

#### Finland, Swedish

O04 Mathematics (Decimal rounded to nearest hundredth – mistranslated stem)

#### Hong Kong

E12 Science (Stone in underground caves – poor discrimination)

J18 Mathematics (Distance between towns from map reduced; scale incorrect)

Z02 Science (Diagram of rain from sea – scoring reliability less than 70%)

#### Hungary

C12 Science (Substance Not a fossil fuel – “fossil fuels” in stem is mistranslated)

#### Indonesia

I12 Science (Interdependence among organisms – five options instead of four)

J05 Science (Gravity acting on rocket – negative discrimination)

#### Iran

B07 Mathematics (Graph showing greatest increase – stem mistranslated in 1995 and 1999)

**Israel, Hebrew**

I07 Mathematics (Area of paved walkway around pool – misprint in key C)  
 O11 Science (Chemical change involving elements – mistranslated key)

**Israel, Arabic**

I17 Science (Animal on Earth longest time – translation error)

**Italy**

L11 Mathematics (Graph of humidity in room – vertical scale on map incorrect)

**Japan**

E12 Science (Stone in underground caves – poor discrimination)

**Jordan**

I17 Science (Animal on Earth longest time – translation error)  
 N09 Science (Balancing 10 and 5 liter buckets – printing problem, figure not clear)

**Korea**

A11 Science (Overgrazing by livestock – misprint)

**Latvia**

E12 Science (Stone in underground cave – poor discrimination)  
 L03 Science (Physical characteristic of prey – mistranslated in stem)

**Macedonia (Both Languages)**

I11 Science (Observation of bubbling electrodes – negative discrimination)

**Macedonia, Albanian**

P09 Mathematics (Expression equivalent to  $n \times n \times n$  – stem misprinted; underscores between n's instead of multiplication signs)

**Macedonia, Macedonian**

P09 Mathematics (Expression equivalent to  $n \times n \times n$  – stem misprinted; nothing between N's)

**Moldova (Both Languages)**

G12 Science (Nonrenewable natural resource – negative discrimination)  
 R01 Science (Bacteria/Mold experiment – mistranslated stem)

**Moldova, Russia**

B07 Mathematics (Graph showing greatest increase – stem mistranslated)  
 E09 Science (Time/temperature table – mistranslated response options)  
 H07 Mathematics (Bar chart histogram of travel time – y-axis mislabeled)

**Morocco**

P10 Mathematics (Diagram of similar triangles – error in labeled angle size)  
 P16 Mathematics (Day/Time in table at shown temperature – printing error; thermometer incorrectly shaded)

**Philippines, Filipino**

L03 Science (Physical characteristics of prey – mistranslation in stem)  
 P16 Mathematics (Day/Time in table at shown temperature – printing error; thermometer not shaded)

**Romania, Hungarian**

C12 Science (Substance Not a fossil fuel – “fossil fuels” in stem is mistranslated)

**Romania, Romanian**

E09 Science (Time/temperature table – Duplicate key resulting in double gridding)

**Slovak Republic**

F03 Science (Humans interpret senses – mistranslated stem)

**South Africa, Afrikaans**

B02 Science (Energy released from car engine – error in key, B)  
 H07 Mathematics (Bar chart histogram of travel time – y-axis mislabeled)  
 I10 Science (Gas need for rust to form – poor discrimination)  
 I14 Science (Transmission of sound on the moon – five options instead of four)

**Thailand**

N17 Mathematics (Amount of paint left – mistranslated stem)  
 P16 Mathematics (Day/time in table at shown temperature – printing error; thermometer not shaded)

**Tunisia**

E12 Science (Stone in underground cave – poor discrimination)  
 O01 Mathematics (Graph of cooling water – printed twice in booklet)  
 P16 Mathematics (Day/time in table at shown temperature – printing error; thermometer not shaded)  
 U01 Mathematics (Printing error in table – missing “2” in first cooling time)

**Turkey**

I17 Science (Animal on Earth longest time – negative discrimination)  
 K11 Science (Thermometer scale for boiling water – negative discrimination)  
 R01 Science (Bacteria/mold experiment – negative discrimination)

**D.2 Items Needing Options Changed****Korea**

C02 Mathematics (Pie graph of crop distribution – switch options C & D)

**Moldova (Both languages)**

I10 Science (Gas need for rust to form – switch options A and B)

**D.3 Items Needing Free-Response Category Recoding****Science**

P06 (Digestion in stomach)

- Recode 10 into 11
- Combine 20, 21, and 22 and recode into 10
- Recode 29 into 19

W02 (Two reasons for water shortage) – For W02D only!

- Recode 10 into 71
- Recode 20 into 10