Toy Workshop Delivery

HOST ONLY - preparation and story

Includes answers. Keep these pages and all hint pages with the adult host.

Welcome to the toy workshop. The sorter remembers its dial positions but has lost the labels on its pulse cards. Your team has the original records on the table. First recover five pieces of information, then use the final plan to configure the toy parcel sorter. Keep every result beside its badge so another teammate can check your reasoning.

1. Print the six player sheets and two record sheets for each team. Keep answers and hints with the host.

2. Lay out Unlabelled legend, Parcel cards, the remaining clue sheets and the final plan. All task records are printed inside the sheets; no extra prop is needed.

3. After each clue, pass roles one seat clockwise. With two players, combine Reader with Recorder and Checker with Builder. With five or six, add a second checker and a source finder; everyone explains one decision.

4 players; 1 team. Give each team 6 player sheets and 2 record sheets. Share one host guide and one set of three hint levels.

Paper and pencils are enough. Keep whole sheets at one table; nothing needs cutting, folding or hiding.

Optional: 4 invitations or certificates, only if selected.

Toy Workshop Delivery

HOST ONLY - solution guide

1. Signal: WAIT-SEND

A consistent one-to-one mapping satisfies every training example. Use the complete mapping to read the two-signal message in order. Result: WAIT-SEND.

2. Record: WEST

Check source status first, then join the matching tag. The useful information comes from separate records, not their printed row order. Result: WEST.

3. Labels: 5

Different positions are 1, 3, 4, 6, 8. There are 5 differences. Result: 5.

4. Weight: 8

Remove 4 from 28; share 24 among 3 parcels to get 8. Check 2 x 8 + 3 = 19. Result: 8.

5. Dispatch: 6

The only order is Test parts > Fit gears > Seal parcel > Send parcel. Position 3 carries 6. Result: 6.

6. Final: A0-B2-C0-D2-E0

Select one pulse card for each of the five badge results. Add the turns by dial column to the printed starting states and wrap each total around 0, 1, 2. The checked configuration is A0-B2-C0-D2-E0; each pulse pair has equal size and total turns, so its shape does not identify the correct choice.

Toy Workshop Delivery

HOST ONLY - timeline, story and ending

3 minutes: Read the opening. Show the evidence record and choose starting roles.

5 minutes: Solve Signal. Offer one hint at a time and rotate roles after checking.

5 minutes: Solve Record. Offer one hint at a time and rotate roles after checking.

5 minutes: Solve Labels. Offer one hint at a time and rotate roles after checking.

5 minutes: Solve Weight. Offer one hint at a time and rotate roles after checking.

5 minutes: Solve Dispatch. Offer one hint at a time and rotate roles after checking.

7 minutes: Build the checked five-dial configuration using all five results.

3 minutes: Read the ending. Ask each teammate to explain one rejected alternative.

After Record: Several recovered pulses may affect the same dial. Keep the legend and the starting positions visible. Pass the record sheet to a new checker before opening the next clue.

After Weight: Four results are recorded. Each teammate points to a source supporting one result. Complete the fifth check before building the checked five-dial configuration.

Check every result using the solution guide. Offer the next hint only when requested; save the answer reveal until the group is ready.

The panel is ready at A0-B2-C0-D2-E0; every recorded pulse has been applied. Thank each teammate for a different piece of reasoning.

Explain one tempting wrong choice and the evidence that ruled it out. Show how each of the five results affected the checked five-dial configuration. If a clue is missing, say what remains uncertain before reopening that sheet.

Duration and ages are estimates. Adjust the pace and offer help for your group.

Toy Workshop Delivery

Player clue 1: Signal | Team 1

The sorter remembers its dial positions but has lost the labels on its pulse cards. We will use the records on the table to configure the toy parcel sorter. Share the reading, explain each choice and keep the five results for the final plan.

Each signal means one different word. Use the training examples to recover the legend. Words marked "any order" may be swapped; compare shared signals across cards. Decode the received message from left to right.

Unlabelled legend

Signals: DOT, BAR, ARC. Words: WAIT, SEND, TURN.

Each signal has one word; each word is used once.

Training messages

DOT+BAR means TURN+SEND (any order)

BAR+ARC means TURN+WAIT (any order)

DOT+ARC means SEND+WAIT (any order)

Received message

ARC > DOT

Report decoded words in order, with hyphens.

Signal result: _____

Toy Workshop Delivery

Player clue 2: Record | Team 1

Use the parcel cards and bench register to follow the completed record. Match printed keys, then report the requested field. A planned or cancelled entry cannot prove a move.

Parcel cards

item: Bench | tag: PINE | status: draft

item: Crate | tag: WAVE | status: checked

item: Rail | tag: STAR | status: cancelled

Bench register

tag: STAR | bay: NORTH

tag: PINE | bay: EAST

tag: WAVE | bay: WEST

Cross-check

Match A.tag to B.tag.

A.status is not cancelled.

A.status is not draft.

Report B.bay.

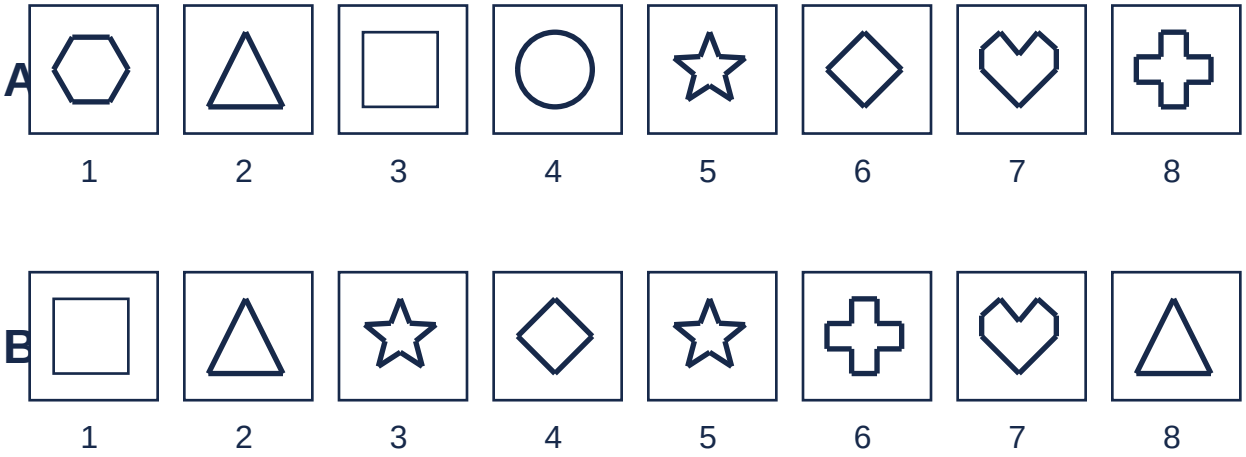
Record result: _____

Toy Workshop Delivery

Player clue 3: Labels | Team 1

Labels desk: Compare the two records at matching numbered positions. Count different pairs once each; ignore box outlines.

Compare matching numbered positions.



Do not count title, labels, or boxes as differences.

Labels result: _____

Toy Workshop Delivery

Player clue 4: Weight | Team 1

Weight desk: Every parcel has the same whole-number weight. Remove loose units, find ONE parcel and check the second rule.

3 parcels + 4 loose units = 28 units

2 parcels + 3 loose units = 19 units

One parcel = ? units. Whole numbers 1-9.

All parcels have equal weight.

Weight result: _____

Toy Workshop Delivery

Player clue 5: Dispatch | Team 1

Dispatch desk: Combine every BEFORE rule to order the four actions. Write positions on the whole-sheet cards. Read position 3.

Fit gears [4]	**Send parcel [8]**
Seal parcel [6]	**Test parts [2]**

Test parts BEFORE Seal parcel

Fit gears BEFORE Send parcel

Seal parcel BEFORE Send parcel

Test parts BEFORE Fit gears

Fit gears BEFORE Seal parcel

Read position 3 (positions start at 1).

Dispatch result: _____

Toy Workshop Delivery

Player clue 6: Final | Team 1

Use the five results to select five pulse cards. Start at the recorded dial states. Add all selected turns for each dial and follow its loop: 0, 1, 2, then 0 again. Report the final state of dials A through E.

Use your results from: Signal, Record, Labels, Weight, Dispatch.

Control panel

Dial order: A, B, C, D, E. States: 0 > 1 > 2 (loop).

Start: A0 / B1 / C2 / D0 / E1.

Pulse cards (turns in dial order)

Signal: WAIT-TURN=(2,1,0,0,0); WAIT-SEND=(1,2,0,0,0)

Record: WEST=(0,2,0,1,0); NORTH=(0,1,0,2,0)

Labels: 0=(0,0,2,1,0); 5=(0,0,1,2,0)

Weight: 8=(1,0,0,2,0); 1=(2,0,0,1,0)

Dispatch: 4=(2,0,0,0,1); 6=(1,0,0,0,2)

Setting rule

Add every chosen pulse. Move around each dial loop.

Report dial ID + state, in order, with hyphens.

Final result: _____

Ask your host to check your final result and read the ending.

Toy Workshop Delivery

Hint level 1 - HOST ONLY

1. Signal

Look at the training cards that share one signal.

2. Record

Start with the status field in Parcel cards.

3. Labels

Compare the same numbered position in the two strips.

4. Weight

Find the equal parcels and the separate loose units.

5. Dispatch

Find all the event cards and the before notes.

6. Final

Find the starting states, dial order and pulse-card key.

Toy Workshop Delivery

Hint level 2 - HOST ONLY

1. Signal

In an unordered pair, a word cannot be assigned by its left/right position. Use the overlap with another pair.

2. Record

The tag links an item to a bay; rows in separate records need not line up.

3. Labels

A difference belongs to a pair of positions and is counted once, even when both shapes differ.

4. Weight

Remove the loose units before sharing the remaining weight among equal parcels.

5. Dispatch

Connect cards linked by the notes; a card position is counted from the beginning of the completed order.

6. Final

Each selected vector lists turns for every dial. Several different cards can affect the same dial.

Toy Workshop Delivery

Hint level 3 - HOST ONLY

1. Signal

Give each signal a different word, check every training example and only then decode the received message in its printed order.

2. Record

Keep only entries meeting every status test. Follow each printed join to the report field; do not guess from row position.

3. Labels

Mark every changed pair, check the unmarked pairs, then count your marks. Ignore titles and box outlines.

4. Weight

Find one parcel from the first equation, then substitute that weight into the second equation before recording it.

5. Dispatch

Check every before relationship, then read only the requested position. The printed card arrangement is not the answer order.

6. Final

Add one dial column at a time to its starting state, wrap around the three-state loop, then check that all five pulse cards were used.

Toy Workshop Delivery

Team 1 result record

Write the complete result from each clue. Results can be words, routes, orders, settings or numbers.

Signal: _____

Record: _____

Labels: _____

Weight: _____

Dispatch: _____

Keep this record beside the final clue. Copy results exactly, including any leading zero.

Reader / Recorder / Evidence checker / Route or model builder

After each clue, pass roles one seat clockwise. With two players, combine Reader with Recorder and Checker with Builder. With five or six, add a second checker and a source finder; everyone explains one decision.

Toy Workshop Delivery

Team 1 final result and celebration

Our final challenge: Final

We combined our earlier clues to decide:

_____

_____

We know it works because:

_____

_____

Host: compare the result with your solution guide. Read the ending when it matches, then let the team explain one discovery.

No physical lock or prize is required. Draw a celebration star here if you like.

Toy Workshop Delivery

You're invited to a mystery!

Join Birthday Explorer for Toy Workshop Delivery.

The sorter remembers its dial positions but has lost the labels on its pulse cards. Work together to configure the toy parcel sorter.

Date: _____

Time: _____

Place: _____

Bring your curiosity. Paper and pencils are provided. Share ideas and solve six clues together.

Designed for ages 8-10. Estimated 35-50 minutes.

Toy Workshop Delivery

You're invited to a mystery!

Join Birthday Explorer for Toy Workshop Delivery.

The sorter remembers its dial positions but has lost the labels on its pulse cards. Work together to configure the toy parcel sorter.

Date: _____

Time: _____

Place: _____

Bring your curiosity. Paper and pencils are provided. Share ideas and solve six clues together.

Designed for ages 8-10. Estimated 35-50 minutes.

Toy Workshop Delivery

You're invited to a mystery!

Join Birthday Explorer for Toy Workshop Delivery.

The sorter remembers its dial positions but has lost the labels on its pulse cards. Work together to configure the toy parcel sorter.

Date: _____

Time: _____

Place: _____

Bring your curiosity. Paper and pencils are provided. Share ideas and solve six clues together.

Designed for ages 8-10. Estimated 35-50 minutes.

Toy Workshop Delivery

You're invited to a mystery!

Join Birthday Explorer for Toy Workshop Delivery.

The sorter remembers its dial positions but has lost the labels on its pulse cards. Work together to configure the toy parcel sorter.

Date: _____

Time: _____

Place: _____

Bring your curiosity. Paper and pencils are provided. Share ideas and solve six clues together.

Designed for ages 8-10. Estimated 35-50 minutes.

Toy Workshop Delivery

Mystery Explorer

Presented to Birthday Explorer

Team member: _____

For completing Toy Workshop Delivery with curiosity, teamwork and kindness.

The panel is ready at A0-B2-C0-D2-E0; every recorded pulse has been applied. Thank each teammate for a different piece of reasoning.

Date: _____

Host signature: _____

Toy Workshop Delivery

Mystery Explorer

Presented to Birthday Explorer

Team member: _____

For completing Toy Workshop Delivery with curiosity, teamwork and kindness.

The panel is ready at A0-B2-C0-D2-E0; every recorded pulse has been applied. Thank each teammate for a different piece of reasoning.

Date: _____

Host signature: _____

Toy Workshop Delivery

Mystery Explorer

Presented to Birthday Explorer

Team member: _____

For completing Toy Workshop Delivery with curiosity, teamwork and kindness.

The panel is ready at A0-B2-C0-D2-E0; every recorded pulse has been applied. Thank each teammate for a different piece of reasoning.

Date: _____

Host signature: _____

Toy Workshop Delivery

Mystery Explorer

Presented to Birthday Explorer

Team member: _____

For completing Toy Workshop Delivery with curiosity, teamwork and kindness.

The panel is ready at A0-B2-C0-D2-E0; every recorded pulse has been applied. Thank each teammate for a different piece of reasoning.

Date: _____

Host signature: _____