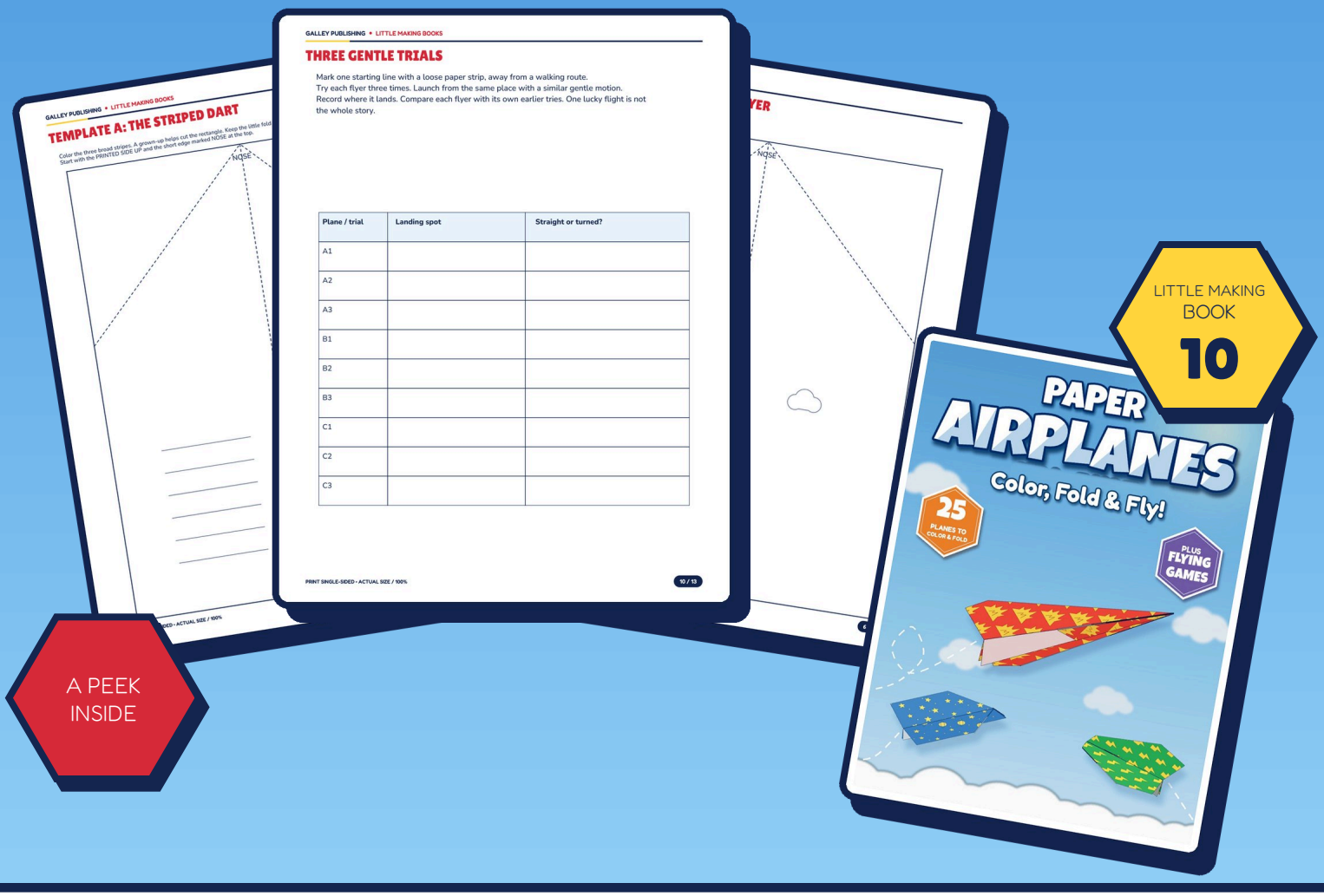
THREE PAPER PLANES TO TEST

FOLD A DART, A BROAD-WING FLYER AND A BLUNT-NOSE GLIDER



GALLEY PUBLISHING

PRINTABLE ACTIVITY BOOKLET

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THREE PAPER PLANES TO TEST

by William L. L. Williams V

Before we begin

Print one side of US Letter paper at Actual Size or 100%. The test square should measure one inch.

Gather paper, crayons, a ruler, a glue stick and tape. A grown-up helps with scissors and tricky folds. Read the extra supply notes before starting. Fly only in a clear area chosen by a grown-up. Never aim at a person, animal or fragile object. You may print copies for your own home or classroom. Please share copies only as permitted above. No child account is needed.

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Author, director and creative artist: William L. L. Williams V.

The crafts are real designs made at home with our kids and were put together into this book by the author. AI tools helped with some of the text and artwork.

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1 INCH

Measure this square before using templates.

OUTSIDE CUT EDGE

FOLD

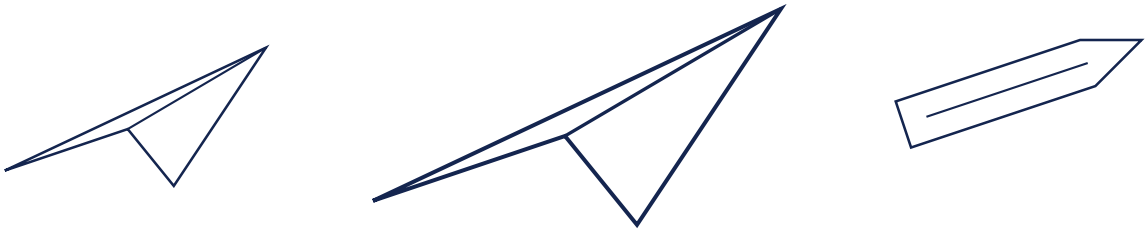
Keep drawn details inside each piece unless an activity says otherwise.

A SMALL FLIGHT WORKSHOP

You will make three paper flyers and compare them. A short glide still gives you something to notice.

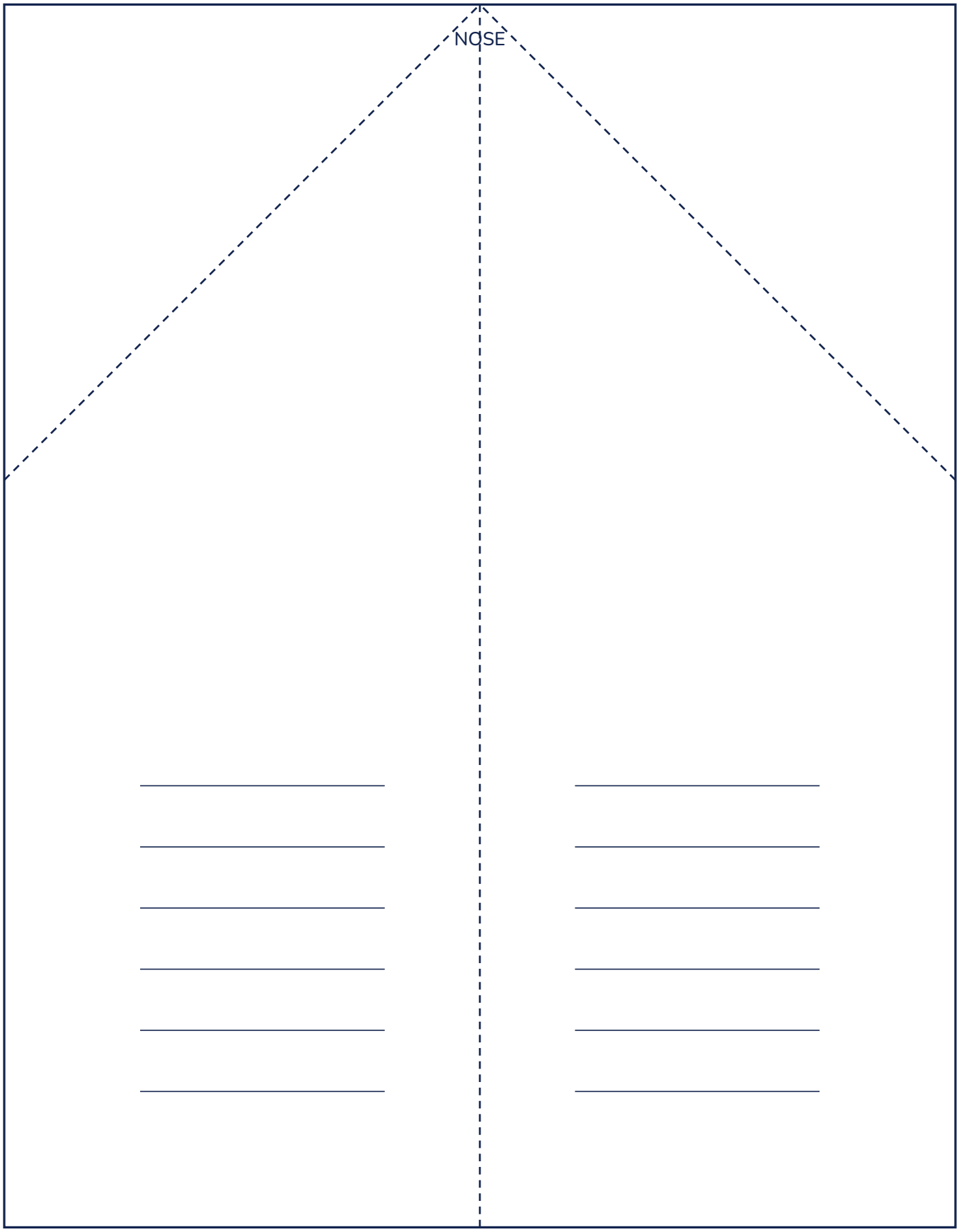
Use the same kind of paper for all three. Ask a grown-up to choose a clear indoor space. Keep people and animals out of the flight path.

Launch gently, away from faces. Wait until all flyers have landed before collecting them.



TEMPLATE A: THE STRIPED DART

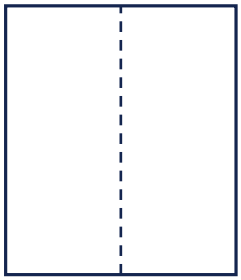
Color the three broad stripes. A grown-up helps cut the rectangle. Keep the little fold numbers readable.
Start with the PRINTED SIDE UP and the short edge marked NOSE at the top.



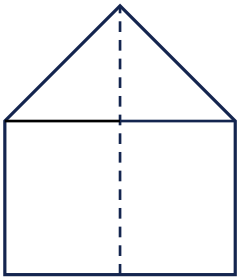
FOLD THE DART

1. Fold the long centerline with printed faces together, then open it.
2. Bring each top corner to the centerline, making the two sloping edges meet.
3. Fold those new sloping edges to the centerline once more.
4. Close the center fold with the layered flaps on the OUTSIDE.
5. Fold one wing down along a line parallel to the spine, leaving a body strip 0.6 inch deep. Repeat on the other side. Open the wings evenly.

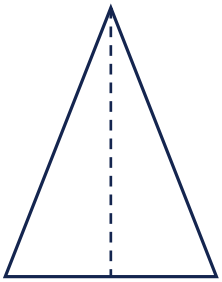
1. Make center crease



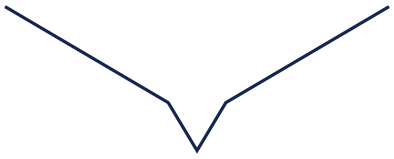
2. Bring top corners in



3. Fold nose edges in again; close



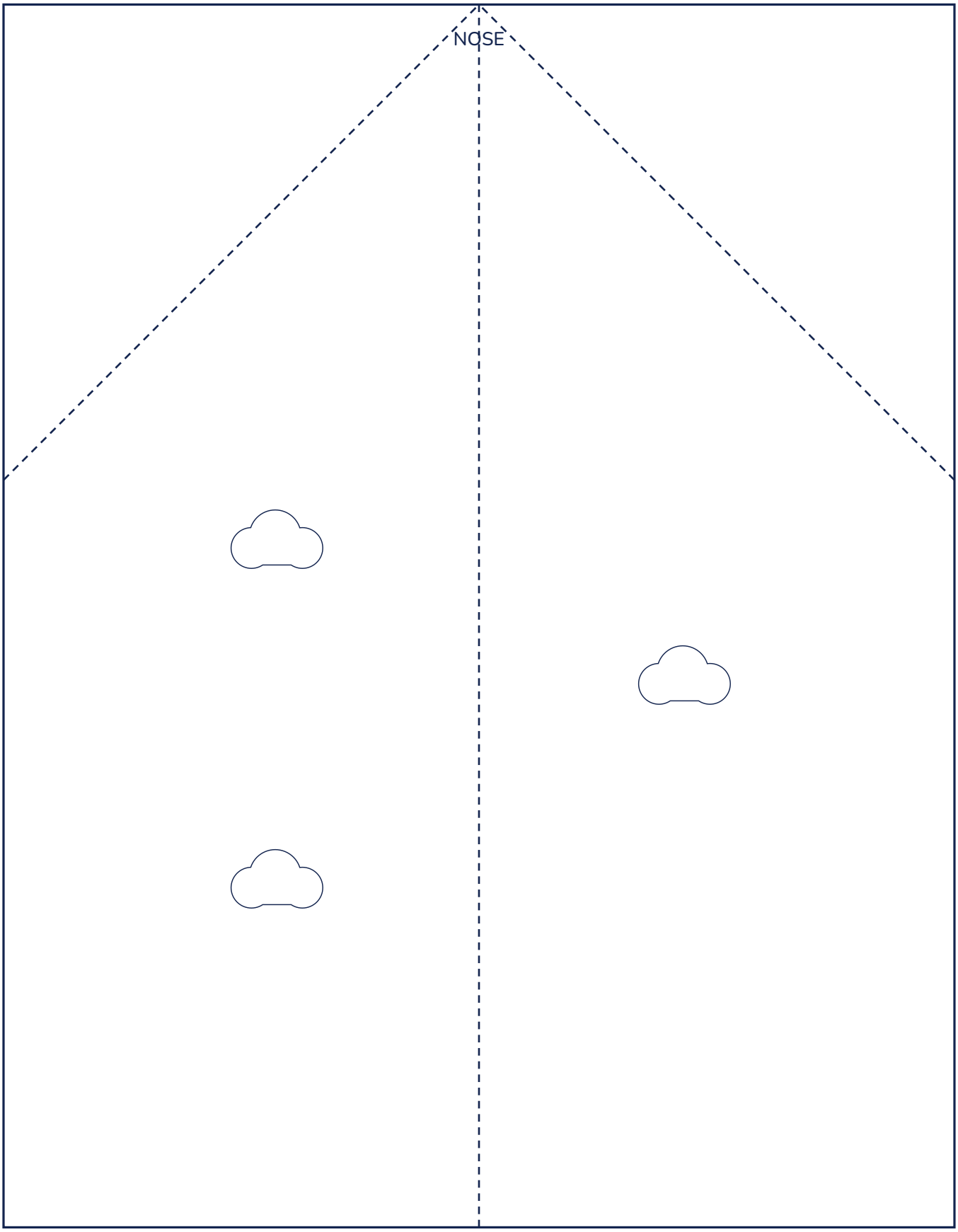
4. Fold wings evenly



EQUAL WING HEIGHT

TEMPLATE B: THE CLOUD FLYER

Color the cloud outlines. A grown-up helps cut the rectangle.
Begin with the PRINTED SIDE UP, NOSE at the top.

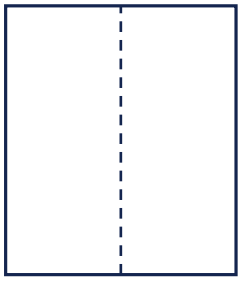


FOLD THE BROAD WINGS

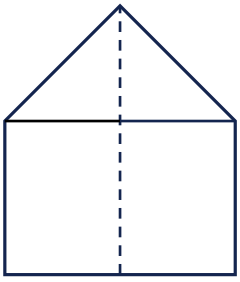
1. Make and reopen the long center crease, printed faces together.
2. Fold the two top corners to that centerline.
3. Close the center fold with the corner flaps OUTSIDE. Skip the dart's second pair of nose folds.
4. Fold each wing outward, leaving a body strip 0.6 inch deep. Open the two wings to the same height.

Compare the wings with the dart. Which has more paper spread out?

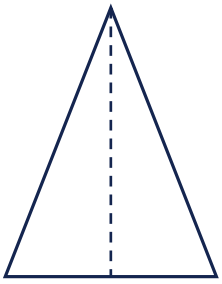
1. Make center crease



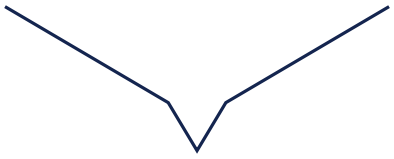
2. Bring top corners in



3. Close with flaps out



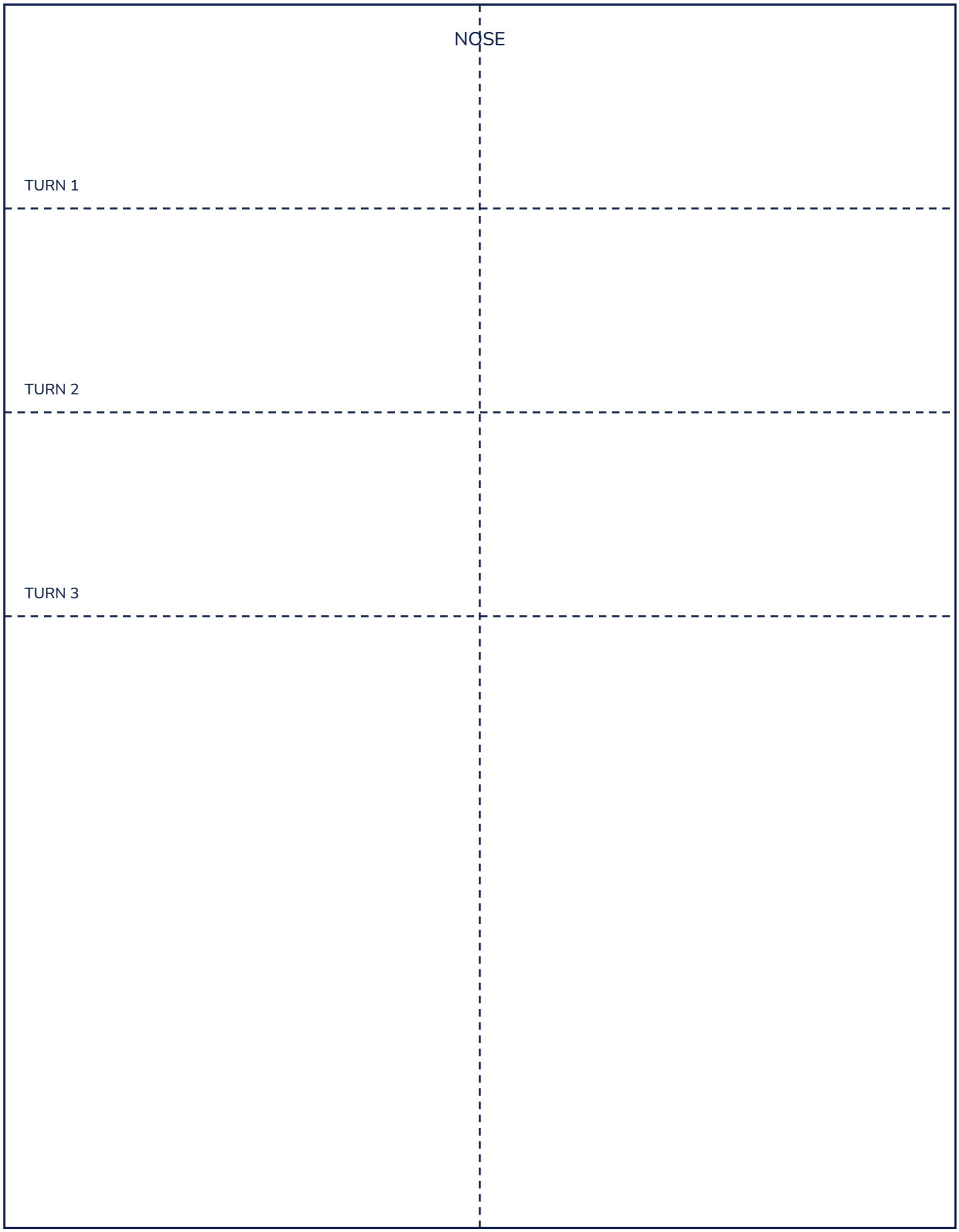
4. Fold wings evenly



EQUAL WING HEIGHT

TEMPLATE C: THE BLUNT-NOSE GLIDER

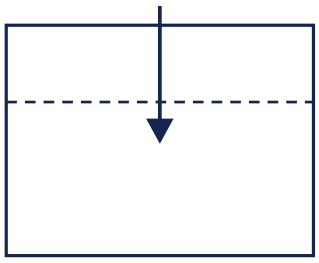
Color the wide checker band. A grown-up helps cut the rectangle.
Start with the PRINTED SIDE UP and NOSE at the top.



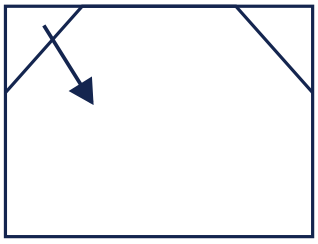
FOLD A BLUNT NOSE

1. Crease and reopen the long centerline.
2. Fold the top 1.5 inches down onto the printed face. Roll that same folded band down twice more, keeping each turn 1.5 inches deep.
3. Fold the two upper corners of the thick band AWAY from you toward the centerline on the back.
4. Fold the whole glider toward you along its centerline.
5. Fold the wings outward, leaving a 0.5 inch body. Bend only the outer 0.25 inch of each wing upward.

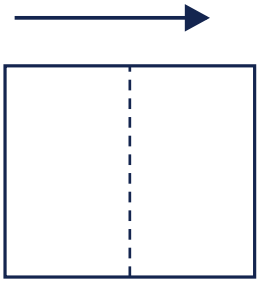
1. Roll top band 3 times



2. Fold thick corners back



3. Close center fold



4. Lift outer wing tips



THREE GENTLE TRIALS

Mark one starting line with a loose paper strip, away from a walking route.
Try each flyer three times. Launch from the same place with a similar gentle motion.
Record where it lands. Compare each flyer with its own earlier tries. One lucky flight is not the whole story.

Plane / trial	Landing spot	Straight or turned?
A1		
A2		
A3		
B1		
B2		
B3		
C1		
C2		
C3		

ONE CHANGE AT A TIME

Check that the wings match. Smooth a loose fold before changing the shape.
Choose one flyer. Make one small change, such as opening both wings a little more evenly.
Try three more gentle launches.
What changed? What stayed the same? Stop if the paper tears or the space is no longer clear.

Plane / trial	Landing spot	Straight or turned?
A1		
A2		
A3		

ANOTHER WAY TO PLAY

Try the activity in a different way. Choose one idea below, then draw or tell what happened.

1 KEEP THE TEST FAIR
Use the same launch spot and gentle movement for every trial.

2 COMPARE WINGS
Lay the dart and cloud flyer together. Point to what is different.

3 CHANGE JUST ONE THING
Adjust one crease, then repeat three trials. Describe the result without racing.

Keep the making at your own pace.

MAKE IT YOUR OWN

Choose one idea from this booklet. Draw a change you would like to try. Tell a grown-up what you will keep the same and what you will change.

MY NEXT IDEA

Enjoyed this pack?

The full book is **Paper Airplanes**:
25 planes to color, fold and fly.
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