#### Dear Educator,

Join the close-knit Mallard Family, from Illumination's new animated film Migration, on a learning adventure with this free educational program created by the curriculum specialists at Young Minds Inspired, Illumination, and Universal Pictures.

Inspired by the Mallards' action-packed, southbound vacation, students explore the science behind avian migration and learn that, like the Mallard Family, they too, can grow and change by spreading their wings and working together.

We hope that you enjoy this program and will share it with other teachers. And please tell us what you think. Comment at ymiclassroom. com/feedbackmigration.

We look forward to receiving your comments.

Sincerely,



Dr. Dominic Kinsley Editor in Chief Young Minds Inspired



Questions? Contact YMI toll-free at 1-800-859-8005 or by email at feedback@ ymiclassroom.com.



#### **Target Audience**

Grades 1-3

#### **Program Components**

Available at ymiclassroom.com/migration:

- This teaching kit with six reproducible student activities
- A poster teaching kit with additional activities for grades 1-3
- A teaching kit for grades 4-6
- A reproducible family take-home letter
- An interactive digital quiz
- An education standards chart
- A feedback form

#### **Concepts and Skills**

Migratory bird habits	Analytical thinking
Ecology	Writing
Bird observation	Math
Family	Observation
Growth and change	Research
· ·	Teamwork

#### **About Migration**

This holiday season, Illumination invites you to take flight into the thrill of the unknown with a funny, feathered family vacation like no other in the actionpacked new original comedy, Migration. The Mallard Family is in a bit of rut. While dad Mack is content to keep his family safe paddling around their New England pond forever, mom Pam is eager to shake things up and show their kids — teen son Dax and duckling daughter Gwen — the whole wide world. After a migrating duck family alights on their pond with thrilling tales of far-flung places, Pam persuades Mack to embark on a family trip, via New York City, to tropical Jamaica. As the Mallards make their way south for the winter, their well-laid plans quickly go awry. The experience will inspire them to expand their horizons, open themselves up to new friends and accomplish more than they ever thought possible, while teaching them more about each other — and themselves — than they ever imagined.

#### **How to Use This Guide**

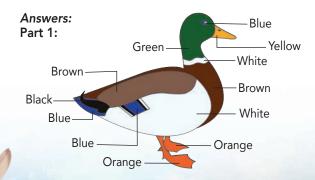
• Photocopy the activity sheets for students to complete in class or at home with their families.

Grades 1-3

- Help children by reading each activity aloud while students follow along.
- Copy and send home the family letter, email it, or post it on your website page.
- Prepare the following resources:
  - o Activity 3 clipboards, if available
  - o Activity 5 collect nest-building materials for student groups in advance, including: grasses, twigs, and other nesting type natural materials; cotton balls, marbles, paper plates, and a timer (optional)
- o Activity 6 a collection of books and media resources to research vacation destinations
- Check out the digital quiz with students.

#### **Activity 1: Meet the Mallards!**

Introduce students to Mack and Pam Mallard — mallard ducks — and two other types of birds that appear in *Migration*. Have students work together to complete Parts 1 and 2.



Part 2: 1. Pigeon (Chump); 2. Red and blue macow, a type of parrot (Delroy)





#### **Activity 2: Migration Math**

Challenge your students to solve these bird migration math problems.

#### Answers:

**Part 1:** 1. piping plover; 2. heron; 3. 25 birds **Part 2:** 10 + 10 + 12 + 3 = 35 food items

Part 3: Best day: Monday; Worst day: Wednesday

Help students understand the difference between head and tail winds. Head winds make flight more difficult because the wind pushes against a duck's wings. Tail winds make flight easier because winds push a duck's wings forward to help them fly faster.

#### **Activity 3: Bird Watching Fun**

Take your students on a science field trip to observe birds outdoors in your schoolyard. Before going, show students images of common local birds from bird field guides from your school or local library that they can look for. You might also visit Cornell's All About Birds site at <a href="https://www.audubor.org/news/">www.audubor.org/news/</a> and Audubon's Bird Guide at <a href="https://www.audubor.org/bird-guide">www.audubor.org/bird-guide</a> to help students identify birds. Both sites include visual and auditory identification features.

Provide students with activity sheets to conduct their observations. Review how to fill in the form. Keep the books on hand during your observation to identify birds you see.

Once done, lead students in a discussion of their observation data. Ask questions such as, What patterns do you notice in your data? Are there connections between weather and bird observations or behaviors? What types of birds did you see most often?

As a follow-up activity, lead students in multiple observation sessions and collect data to make a variety of graphs, such as the number of birds observed over a specific period of time. Visit community science resources such as Cornell's Celebrate Urban Birds and eBird, and Journey North to further extend bird watching activities and sharpen bird identification skills while helping students participate in scientific research and data collection about birds.

#### **Activity 4: Are We There Yet?**

Do students have vacation routines? Read the chart in Part 1 that describes some of the Mallard Family's travel likes. Then have students complete the chart to write their own answers about vacations or staycations. You might use students' answers to graph the combined class data for each category.

For Part 2, discuss vacation ideas to help students brainstorm. When done invite students to share their written stories with one another.

#### **Activity 5: It Takes Teamwork!**

Prepare the materials for creating birds' nests ahead of time. To start this activity, take students outside and challenge them to form a V-shape to represent a group of migratory birds in flight. Who will be in the front? How will they arrange themselves? What will their order be? After the experience, discuss how they worked together to make their V. Explain that birds know instinctively how to do this.

Distribute the activity sheets and review the V-formation and nest facts.

Next, assign student groups and review the directions for the STEAM challenge. Distribute the materials, instructing students to use 10 minutes to draw and discuss their initial ideas and make their nest plans. Set a specific time limit for nest construction and monitor student work.

Once the teams are done, have a Gallery Walk to look at each team's nest. Next, lead students in a talk about their group experience. Ask students how they felt they accomplished their goal, how they worked together, and how they may have worked out any confusion or miscommunication, as well as what they might do differently next time. Nests may become classroom display. Remember to recycle nest materials afterward.

#### **Activity 6: Where to Next?**

Help students brainstorm possible vacation destinations for Parts 1 and 2. Plan a visit to the school library to find information about these locations to help students complete the vacation planner sections. (This also makes a great family activity!) Invite students to share their completed itineraries with one another.

#### **Check Out the Digital Quiz!**

Extend the migration journey with a fun, interactive digital quiz that students can do in class with your help or at home with their families. Go to **ymiclassroom.com/migration** for the game. Remember to download the letter for families to send home while you're there.

#### Resources

www.migration.movie ymiclassroom.com/migration



Activity 1 Reproducible

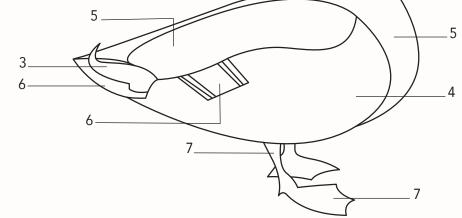
### MEET THE MALLARDS!

**PART 1** This is Mack. His family belongs to the mallard species of ducks. Mack is a drake, or a male mallard. Follow these steps to learn more about a male mallard's field marks, or patterns and colors.

• Read the words in the word bank to learn about the parts of the mallard.

• Color by number to show the beautiful feather markings.

Word Bank	Color Codes
head bill neck ring breast wings eye tail feathers legs	1 = green 2 = yellow 3 = black 4 = white 5 = brown 6 = blue 7 = orange



PART 2 This is Pam. She's also a mallard with different markings than Mack. Female mallards have an orange and black bill instead of a yellow one. They are mostly shades of brown all over, including their heads.

Look at the pictures below of two friends the Mallard Family meets on their migration vacation. Do you know what kind of birds they are? Read the clues to figure it out.

1. I have a small head and short, pale red legs, with blue-gray feathers and dark wings.

What kind of bird am I? (Hint: It starts with P.)

2. I have bright colored feathers, a black beak strong enough to crack open shells, and large black eyes surrounded by yellow markings.

What kind of bird am I? (Hint: It starts with M.) \_





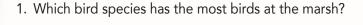




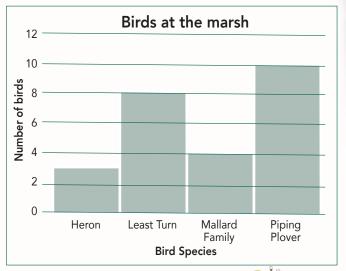
# MIGRATION MATH



PART 1 Marsh Visitors! The Mallard Family has stopped at a marsh to rest and eat on their way to Jamaica. Use the graph to answer questions about other bird species at the marsh.



- 2. Which bird species has the least birds at the marsh?
- 3. How many total birds are at the marsh? \_\_\_\_\_



PART 2 Time to Eat! The Mallards need to eat a lot of food during their migration. In one stop they eat 10 plant roots, 10 leaves, 12 insects, and 3 snails. How many food items did they eat at this stop?



PART 3 Let's Fly! Use the sky conditions chart to help the Mallard Family figure out the best day to head out on their migration!

Daily Sky Conditions						
DAY Clear Cloudy Head Winds Rainy Tail Winds						Snow/Ice
Monday	Х				X	
Tuesday	Х		X			
Wednesday		Х	X	Χ		
Thursday		X		Χ		
Friday		Х				X

Best day to fly: Worst day to fly:





Activity 3 Reproducible

### BIRD WATCHING FUN

Head o	utdoors to	observe birds	Date:	-	Time:	
					_	

**PART 1** Circle the words that best describe weather conditions during your observation.



Sky:	Cloudy	Sunny/Clear	Partly Cloudy	
Winds:	Strong	Light	Calm/No wind	
Temperature:	Hot	Warm	Cool	Cold

PART 2 Fill in the chart below as you observe birds. Things to look for as you watch:

- Field markings (colors of feathers, eyes, beak, and feet)
- Size (compare to other birds you know or to objects, like a can or a book)
- Behavior (what is it doing, where does it spend its time)
- Call/song (the sounds it makes)

Description or drawing of bird	Tally (write 1 each time you see the bird)	Total number of birds seen (add up all the 1s)



#### **GWEN'S BIRD WATCHING TIPS**

- 1. Find a good spot near trees, fences, or bushes. (You can watch indoors from a window, too.)
- 2. Wait for birds to come near you.
- 3. Stay quiet and calm.
- 4. Listen. Sometimes birds are heard before they are seen!
- 5. Be patient!



Activity 4 Reproducible

# ARE WE THERE YET?

PART 1 Vacations are awesome! Complete the chart to find out what your vacations have in common with the Mallard Family's!



Vacation Item	Mallard Family Vacation Favorites	My Family Vacation Favorites
Snacks/foods	Snails, water plants, insects	
Place to stop	Ponds and swamps	
Rest activity	Sleeping with one eye open Swimming	
Games to play on the way	Counting other birds in the sky	
Item I can't leave without	My family	

**PART 2** What's your favorite vacation (or staycation) memory? Did something funny or unexpected happen? On the back of this sheet, write or draw about it.







Migrating ducks work together to fly in a V-formation. Read about how this helps them fly.

#### BENEFITS

- Air movement through wings breaks wind resistance
- Helps save ducks' energy for a long flight
- Allows more gliding and less flapping
- Helps birds stick together and keep track of each other
- Makes communicating easier

#### GENERAL DETAILS

- The ducks take turns leading the V so the same duck is not in front all the time.
- They flap their wings in unison, which means at the same time.

Before you begin, draw a picture of your

idea on the back of

this paper. Share it

with your group.

#### **BUILD A NEST STEAM CHALLENGE!**

Work with your team to build a duck's nest.

#### **Materials:**

- Collection of twigs, leaves, grass, and other natural items (to use for building the nest)
- 1 paper plate (to hold your nest)
- 7 marbles or cotton balls (for "eggs")
- 2 extra cotton balls (to fluff the nest)

#### **Nest goals:**

- Must be bowl-shaped.
- Must stay together.
- Must hold at least 7 "eggs" (marbles or cotton balls).
- No glue or tape may be used.

#### **DID YOU KNOW?**

- Only hens (female mallards) make nests.
- They are built near, not in, water.
- Nests are made of leaves and grasses.
- Hens use some of their own feathers to make the nest soft.
- Nests are about 7 to 8 inches wide and 1 to 2 inches deep.
- Hens lay around 1 to 2 eggs per day for a total of about 7-12 eggs.

Join the **Mallard Family** 

on their fun-filled migration vacation to Jamaica! Migration is only in theaters December 22.







### WHERE TO NEXT?

PART 1 Help the Mallard Family decide where to go on their next migration vacation. Use the spaces below to make a plan that will convince Mack that it's time to fly again!

FANTASTIC DESTINATION	
City, State, or Country:	
Why the Mallards should go:	
AWESOME THINGS TO SEE AND DO	
PLACES TO STOP ALONG THE WAY	
PART 2 Where would you like to go on your dream vacation? Show your plan below.	
MY FANTASTIC VACATION DESTINATION	
City, State, or Country:	
AWESOME THINGS I WILL DO	
1	
2	
WHO'S GOING WITH ME	

Join the **Mallard Family** on their fun-filled migration vacation to Jamaica! Migration is only in theaters December 22.







MY VACATION SELFIE

Draw your picture on the back of this sheet.

Scroll down for a special discount ticket offer.

#### TAKE FLIGHT WITH

© ILLUMINATION PRESENTS

## MIGRATION

#### Dear Parents and Guardians,

With a classroom program inspired by the new animated Illumination film, *Migration*, your child has been learning about birds and migration, and that they, too, can grow and change by working together. Ask your child to share some fun new facts they've learned! Then, keep the fun going with the activities below.

#### Let's Fly

Let the Mallard Family lead the way. Check out the **Let's Fly** interactive digital quiz with your child to test your migration knowledge: **ymiclassroom.com/migration**.

#### **Adventure Together!**

Have some family fun talking about your own fictitious migration vacation! At dinner or during a car ride, have each family member answer the following questions:

- Where would you go on a migration vacation?
- What are two places you would stop along the way to rest or for sightseeing?
- If you could only pack 5 things, what would you pack?
- What type of bird do you think would give the best travel advice?
- If you could join the Mallards on their migration vacation to Jamaica, would you go? Why or why not?
- What would be fun about flying with the Mallards?
- Who do you think you'd meet traveling with the Mallards?

Let your imaginations soar!

#### Birds of a Feather Observe Together!

Make bird-watching a family activity! It's fun and it encourages your child's focus and observation skills. You can even participate in community science by submitting your observations into bird migration databases, such as eBird, Project Feeder Watch, and the Great Backyard Bird Count. Find out more about these opportunities at The Cornell Lab of Ornithology at birds.cornell.edu/home/citizen-science-be-part-of-something-bigger.





#### ABOUT MIGRATION

This holiday season, Illumination invites you to take flight into the thrill of the unknown with a funny, feathered family vacation like no other in the new actionpacked, original comedy, Migration. The Mallard Family is in a bit of rut. While dad Mack is content to keep his family safe paddling around their New England pond forever, mom Pam is eager to shake things up and show their kids — teen son Dax and duckling daughter Gwen — what else is out there in the world. After another migrating duck family lands on their pond with thrilling tales of far-flung places, Pam persuades Mack to embark on a family trip to tropical Jamaica. As the Mallards make their way south for the winter, their welllaid plans quickly go awry. The experience will inspire them to expand their horizons, open themselves up to new friends, and accomplish more than they ever thought possible, all while teaching them more about each other — and themselves — than they ever imagined. Check out the trailer at (



www.migration.movie.

Gather your flock to see Migration in theaters over the holidays.

Special Offer: Buy 3 tickets and get 1 FREE

(while supplies last)

Go to https://www.fandangomovietickets.com/ymispecialoffer/ for details.

Desplácese hacia abajo para obtener una oferta especial en la compra de boletos.

#### LEVANTE VUELO CON

ILLUMINATION PRESENTS

## MIGRATION

#### Estimados padres y tutores:

Gracias a un programa para el aula inspirado por la nueva película de animación de Illumination, ¡Patos! (*Migration*), su hijo estuvo aprendiendo sobre las aves y la migración, y que ellos también pueden crecer y cambiar si trabajan juntos. ¡Pídale a su hijo que le cuente cosas divertidas que haya aprendido! Luego, diviértanse juntos con las siguientes actividades.

#### iA volar!

Dejen que la familia Mallard les muestre el camino. Vea el cuestionario digital interactivo ¡A volar! (Let's Fly) con su hijo para poner a prueba sus conocimientos sobre la migración de aves: ymiclassroom.com/migration.

#### iTengan una aventura juntos!

Diviértanse en familia hablando sobre unas vacaciones imaginarias a nuevos destinos. Durante la cena o un paseo en auto, cada integrante de la familia debe responder las siguientes preguntas:

- ¿A dónde irías en unas vacaciones para conocer nuevos lugares?
- ¿En qué dos lugares te detendrías en el camino para descansar o visitar?
- Si solo pudieras empacar cinco cosas, ¿qué llevarías?
- ¿Qué tipo de ave crees que podría dar los mejores consejos sobre viajes?
- Si pudieras unirte a los Mallard en su aventura a Jamaica, ¿irías? ¿Por qué sí o por qué no?
- ¿Qué sería divertido de volar con los Mallard?
- ¿A quién crees que conocerías viajando con los Mallard?

¡Dejen volar la imaginación!

#### iObservación de aves en familia!

Observen aves en familia. Es divertido y mejora las habilidades de concentración y observación de su hijo. Incluso pueden participar en proyectos de ciencia de la comunidad enviando sus observaciones a bases de datos sobre migración de aves, como e-Bird, Project Feeder Watch y The Great Backyard Bird Count. Conozca más sobre estas oportunidades en el Laboratorio de Ornitología de la Universidad de Cornell en birds.cornell.edu/citizen-science-be-part-of-something-bigger.



### SOBRE PATOS! (MIGRATION)

En esta temporada de fiestas, Illumination los invita a levantar vuelo hacia lo desconocido con unas vacaciones familiares inigualables llenas de diversión (y plumas) en la nueva comedia original repleta de acción: ¡Patos! (Migration). La familia Mallard está atascada en la rutina. Mientras que el papá Mack está satisfecho con mantener a la familia segura en su estanque de Nueva Inglaterra para siempre, la mamá Pam busca un cambio y quiere mostrarle a sus hijos – su hijo adolescente Dax y su pequeña hija Gwen – qué más hay por ver en el mundo. Después de que otra familia de patos migrantes aterriza en el estanque con historias emocionantes de lugares lejanos que visitaron, Pam convence a Mack de embarcarse en un viaje familiar hasta la tropical Jamaica. A medida que los Mallard vuelan al sur para pasar el invierno, los planes rápidamente comienzan a complicarse. La experiencia los inspirará a ampliar sus horizontes, abrirse a nuevos amigos y lograr más de lo que creyeron era posible, todo eso mientras aprenden más unos de otros (y de ellos mismos) de lo que habían imaginado jamás. Vea el avance en www.migration.movie.



Oferta especial: Compre 3 boletos y obtenga 1 GRATIS

(hasta agotar existencias)

Visite https://www.fandangomovietickets.com/ymispecialoffer/ para obtener detalles.