

Alaska Agriculture Day

Carrot Seed Tape Activity



For questions please contact:

Johanna Herron: 907-374-3714, Johanna.herron@alaska.gov

Kristi Krueger: 907-761-3858, Kristi.krueger@alaska.gov

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Objective:

The objective of this activity is to teach how to make carrot seed tape for summer planting.

*A neat variation on this activity is to alternate the carrot seeds with radish seeds because they grow fast and break the soil for the carrots to break through. Ask the kids to hypothesize about why you would alternate with radish seeds!

Materials: (Estimated cost of materials per station is \$10.00)

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|---------------------------|---|
| Spray bottle (water) | Paper bags for storage |
| Toilet paper (double ply) | Pre-made label (provided by Farm to School Program) |
| Carrot seeds | Scotch tape or marker to write name on bag |
| Ruler | Pen to roll seed tape around |



Lesson Topics: PK - 12

Depending on the age group the lesson can draw on a number of different topics:

- ***Counting and measurement*** – this can be as basic as 1-2-3 or as complex as the economics of utilizing seed tape. Simple activities can be about counting the number of seeds or a little more challenging and measuring the spacing of the seeds. For more complex economic activities there are a number of topics; seed tape saves money by making your own – premade seed tape is expensive, seed tape uses ALL seeds which increases the yield per seed ratio, and seed tape decreases crop maintenance (labor dollars) due to no need for ‘thinning’ of carrots.
- ***Science or health*** – you can discuss any number of things; nutrient balance in soil, carrot nutrition, carrot recipes, seed germination, plant growth, or plant life cycles.

- **Critical thinking** – this can be as simple as ‘how does a carrot grow/what kind of vegetable is a carrot’ and as complex as understanding the proper time to plant the seed tape and predicting how the seed tape impacts the soil compared to traditional ways of planting carrots (a bunch of seeds and then thinning). *A neat variation on this activity is to alternate the carrot seeds with radish seeds because they grow fast and break the soil for the carrots to break through. Ask the kids to hypothesize about why you would alternate with radish seeds!
- **Art and reading** – Have the kids draw or journal about the growth cycle over the summer!

Procedure:

Station set up:

Each station should have 1-4 students with a spray bottle, a ruler for each student, and a small pile of seeds. Draw an example of the final product on the board for them to follow the steps with. Start with a class discussion; for any age group you can talk about the activity, make predictions, and why carrots are good for you.

1. Tear off 2-4 squares of toilet paper for each student.
2. Gently spray the toilet paper and line up the ruler along the toilet paper bottom or top.



3. Place a carrot seed along the middle of the toilet paper. Be sure to space the seeds based on the seed packet's recommendation. *Tip:* Alternate carrot seeds with radish seeds because when the radishes sprout, they help to mark the row and break the ground.



4. Take each top edge and fold down 1/3 followed by a gentle tap to secure.



5. Take each bottom edge and fold up 1/3 followed by a gentle tap to secure.



6. If needed, spray again to secure the seed tape and place somewhere to dry.
7. Have each student write their name on the masking tape or paper bag and put aside.
(Planting instructional label should be pre-printed or written and already placed on paper bag – see example wording below)

Make sure seed tapes dry so the seeds don't germinate!
When planting weather comes:
-make shallow furrows in soil, around ¼ inch
(ground is preferable, potters can be used if they are deep and fit the strip of seed tape)
-lay the strips down
-cover with soil and gently pat down

8. After the seed tape is reasonably dry, the student should roll it around a marker or pen to make a circle and then put in bag to store until planting.

