## Old Carolers' Square – Solution

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As the flavor text mentions, this puzzle presents a series of sheets of paper. Each one contains several lines of sequences of emoji. Clued by "Carolers" in the puzzle title, each sheet contains lyrics from well-known Christmas songs but expressed as emoji. The emojis are mostly direct translations (e.g., "bird" to "bird" <sup>(2)</sup>) or match semantically ("our", "i", "we" to "selfie" <sup>(1)</sup>). A few involve homonyms where there's a fun bit of stretching (e.g., "tender" to "dollar banknote" <sup>(2)</sup> as in "legal tender").

The flavor text also mentions "something about each one that's not quite right", clueing the fact that each sheet has one emoji that does not match the real lyric. After identifying the not-quite-right emoji by its canonical name and the correct word from the lyrics, one may notice that each pair of words have identical lengths. Moreover, each pair of words also shares exactly one shared letter in the same position. These are so-called "eigenletters" and extracting them yields the final answer, **STREISAND**.

EMOJIS	SONG	LYRICS	EXTRACTION
<b>∮ 🕹 → 単 + ⊨</b> + ♦ <b>∮</b>	Sleigh Ride	Our cheeks are nice and rosy and comfy and cozy are we	KIS <b>S 🔌</b> LET <b>S</b> S
		We're snuggled up together like two birds of a feather would be Let's take the road before	
		us and sing a chorus or two Come on, it's lovely weather for a sleigh ride together with you	
<ul> <li>■ J = == ;; </li> <li>● M = Q = </li> <li>● M = J = </li> <li>● M = J = </li> </ul>	Let It Snow	When we finally kiss goodnight How I'll hate going out in the storm But if you really hold me	ASTRONAUT 🗟 GOODNIGHT T
** 🛃 🏠 🏒 😥		tight	

		All the way home I'll be warm	
🔣 🛤 🏒 🎁 👊 🏒 🤎	Last Christmas	Last Christmas, I gave you my heart	DOO <b>R</b> YEA <b>R</b>
		But the very next day, you gave it away	R
┡ ▋ [1] ♪ 😳		This <b>year</b> , to save me from	
<b>₽ 🗇 오</b> 👯		tears	
		I'll give it to someone special	
J 4 🥺 🚱 🕼 J 🛅	All I Want for	l just want you for my own	KITE 🥈
🏂 🤲 👍 ∞ 📚	Christmas is You	<b>More</b> than you could ever know	MOR <b>E</b> E
🚧 🏒 🖾 👇 🔽		Make my wish come true	
₩ 🤳 🥹 🖬 🕼		All I want for Christmas is you	
	Silent	Silent night, holy night	FISH 🔍
	Night	All is calm, all is bright	MILD
*** <u>&amp;</u> *** -ÿ <del>.</del>		Round yon Virgin, Mother	I
● ← 🔟 🤱 + 😔		and Child	
😇 🔁 🛤 🛨 👁		Holy Infant so tender and <b>mild</b>	
In the second se		Sleep in heavenly peace	
🤯 📥 🧔 🚯		Sleep in heavenly peace	
2 🕰 🌭 🥒 🖨 🛦 🏒	Santa Baby	Santa baby, just slip a <b>Sable</b> under the tree for me	SOCKS ∉ SABLE
🗹 👎 👍 👧		Been an awful good girl	S
🧝 🔁 🕨 🛡 🕌 🎆		Santa baby, so hurry down the chimney tonight	

درار في ارار في ارار في ارار برار في ارار في ارار برار في ارار في ارار في ارار	Jingle Bell Rock	Jingle bell, jingle bell, jingle bell rock Jingle bells chime in jingle bell time Dancin' and <b>prancin'</b> in Jingle Bell Square In the frosty air	FEATHER PRANCIN A
<ul> <li>♦ ≅ 11 ≅ ♥ ≅ № ≅</li> <li>+ ₩ ₩ ₩ ₩ % ● </li> <li>Ø 4 Ø 4</li> <li>Ø 4 Ø 4</li> <li>Ø 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</li></ul>	Silver Bells	Children laughing, people passing, meeting smile after smile And on every street <b>corner</b> you hear Silver bells, silver bells It's Christmas time in the city	WRENCH 🔧 CORNER N
<ul> <li>▶ 1</li></ul>	Rudolph the Red-nosed Reindeer	Then one foggy Christmas Eve Santa came to say " <b>Rudolph</b> , with your nose so bright Won't you guide my sleigh tonight?"	WEDDING 🏫 RUDOLPH D

## Author's notes

The idea for this puzzle's mechanic came from the occasional work pastime of responding to Slack messages with some kind of emoji representation. Christmas songs were an obvious general subject for a Christmas-themed hunt, and song lyrics seemed like a good fit for something that would be interesting for the solver to identify from emojis. Writing translations for songs using emojis ended up being a really fun thing to try to do, and I wrote emoji lyrics for a bunch more songs than we actually needed.

When translating the songs, there were always one or two words that were especially hard to choose a good emoji for. Having those words be involved in extraction was then a natural solution for not having to figure them out. The initial version of the puzzle simply had blanks in those spaces, asked the solver to identify the missing words, and then explicitly indicated which letters to extract. That version of the puzzle ended up feeling a little bit too light on substance. Zach Barnett, who test-solved the first version, had the great suggestion of substituting in other emoji so that we could use eigenletters for the final extraction. Something I especially liked about this extraction mechanic is that it forces the solver to appreciate all of my emoji work, not just the minimal amount to identify a song!